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October 10, 2003

Arizona Corporation Commission
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Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ

HAND-DELIVERY

Re: Arizona-American Water Company 2002 Rate Filings;
WS-01303A-02-0867, *et al.*

Dear Colleen:

Today Arizona American Water Company is filing an Original and 21 copies its Rebuttal Testimony in the above referenced consolidated cases. The Rebuttal Testimony consists of four parts: two spiral bound binders (Volumes 1 and 2) and two notebooks (Bourassa Rebuttal Exhibits and Bourassa Rebuttal Schedules). We are filing 22 copies of each binder and notebook along with 22 copies of the Notice of Filing Rebuttal Testimony.

If you have any questions or comments, please feel free to contact me at any time.

Very truly yours,

Jeannie Pribbeno
Legal Assistant

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AZ CORP COMMISSION
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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WEST WATER AND WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0867** **WS-01303A-02-0868** **W-01303A-02-0869** **WS-01303A-02-0870** **W-01303A-02-0908** **(Consolidated)**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS.	**NOTICE OF FILING REBUTTAL TESTIMONY**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.

Arizona-American Water Company hereby provides notice of the filing of its rebuttal testimony in the above-captioned dockets. Arizona-American's rebuttal witnesses include David P. Stephenson, Thomas J. Bourassa, William Stout, Fredrick Schneider, Thomas J. Zepp and Ronald L. Kozoman. Each witness' rebuttal schedules and other rebuttal exhibits are included as attachments to the witness' individual rebuttal testimony, with the exception of Mr. Bourassa, whose rebuttal schedules and exhibits are filed in separate binders.

DATED this 10th day of October 2003.

By _____
Norman D. James
Jay L. Shapiro
Attorneys for Arizona-American Water Company

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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.

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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0868**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	**DOCKET NO. W-01303A-02-0869**

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0870**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.	**DOCKET NO. W-01303A-02-0908**

REBUTTAL TESTIMONY OF

DAVID STEPHENSON

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE NUMBER.

A. My name is David P. Stephenson. My business address is 303 H Street, Suite 250, Chula Vista, California 91910. My telephone number is (619) 409-7700.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Service Company, as the Director of Rates and Planning for AWW's water and wastewater utilities located in Arizona, California, Hawaii, New Mexico and Texas, including Arizona-American.[1] These five utilities are commonly referred to as the Western Region. I am also an Assistant Treasurer for Arizona-American.

II. OVERVIEW AND SUMMARY OF REBUTTAL TESTIMONY

Q HAVE YOU READ ALL OF THE DIRECT TESTIMONIES OF THE WITNESSES FOR THE STAFF, RUCO, AND THE TOWN OF YOUNGTOWN?

A. Yes, I have.

Q. DO YOU AGREE WITH ALL OF THE PROPOSED ADJUSTMENTS AND RECOMMENDATIONS BY EACH OF THE PARTIES?

A. No, I do not.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose of my rebuttal testimony is to respond to various issues raised in the testimony of the witnesses for Staff, RUCO and the Town of Youngtown ("Youngtown"). I will generally be covering issues related to: 1) the Company's

[1] As applicable, I will use the same abbreviations and conventions in this rebuttal testimony as I utilized in my direct testimony for Arizona-American.

overall filing, the test period and the timing of the filing; 2) the acquisition premium; 3) inclusion of Service Company charges in the test period; 4) rate case expense; 5) issues related to capital structure and cost of debt; and 6) issues related to the financial integrity of the Company.

III. SUMMARY OF ARIZONA-AMERICAN'S REQUEST FOR RATE RELIEF

Q. WHY DID ARIZONA-AMERICAN SEEK RATE RELIEF USING A 2001 TEST YEAR?

A. The Company filed for rate relief because the rates being charged in most of the water and wastewater districts acquired from Citizens are inadequate to allow for recovery of operating expenses and a reasonable return on the Company's investment in plant to serve customers. We determined that, for ease of presentation, the period ending December 31, 2001, was the appropriate test period for this case as it is closely aligned with the purchase of the Citizens Assets by Arizona-American.

Q. DO YOU AGREE WITH STAFF AND RUCO THAT THE RATE FILING WAS BASED ON A "STALE TEST YEAR"?

A. No. Staff witness Darron Carlson alludes to his belief that these cases are based on a stale test year. Direct Testimony of Darron W. Carlson ("Carlson DT") at 10-11. However, Mr. Carlson never defines "stale" nor explains why the Company's filings should be considered stale. RUCO witness Rodney Moore uses the word stale along with other unfavorable adjectives to describe information provided by the Company. Direct Testimony of Rodney L. Moore ("Moore DT") at 2, l. 23. Like Mr. Carlson though, Mr. Moore provides no definition or description for this term, and never really claims that the applications were stale, only that certain information should be considered stale.

In response to Company data request 2.15, Staff defined stale as "having

lost freshness" and further stated that the test year chosen by Arizona-American "doesn't appear to be the most recent practical year." See Staff Response to Data Request 2.15, copy attached hereto as Stephenson Rebuttal Exhibit 1. Again, however, Staff provides absolutely no support for Mr. Carlson's contention that Arizona-American did not use the most practical test year, nor does Staff present any evidence as to what would be considered a more practical test year.

Q. WAS THE COMPANY'S FILING BASED ON THE MOST PRACTICAL TIME PERIOD AVAILABLE?

A. Yes, as explained in my direct testimony, Arizona-American had no choice but to use the time period and data that it did to file these cases. To use a 2002 historical year and test year, Arizona-American would have had to wait until well past year-end 2002 to compile and prepare the filing and, by that time, we would have been prohibited from seeking rate relief due to the three-year moratorium imposed in Decision No. 63584 (December 12, 2001). The Company would have incurred severe financial hardship had it not sought rate relief for another three years.

Q. WHY COULDN'T ARIZONA-AMERICAN FILE BASED ON SOME OTHER 12-MONTH PERIOD ENDING AT SOME POINT IN 2002?

A. Quite simply it would have been impossible to file a case based on a partial year of Citizens data and a partial year of Arizona-American data. The two companies use different accounting and customer billing software programs. The output of these programs would have made it impossible to integrate the data successfully.

Q. WHY DID ARIZONA-AMERICAN TELL STAFF THAT IT WOULD FILE FOR RATE RELIEF BASED ON A JUNE 30, 2002 TEST PERIOD?

A. To my knowledge we never made such a representation to Staff, as Mr. Carlson alleges. Carlson DT at 13. It is possible that we said we would cut off plant addition as of June 30, 2002, providing the case was filed in July or August 2002,

but given the fact that we could not use a partial year of Citizens' data and a partial year of Arizona-American data, it was never even a consideration to file on any other period than a test period ended December 31, 2001.

Q. DID THE COMPANY TELL STAFF THAT IT WOULD FILE THE CASE WITH NO POST-TEST YEAR PLANT ADDITIONS?

A. No, although we did indicate that we would not file a case with pro forma plant additions further than three months beyond the filing date. This is consistent with the rate applications we filed in late November 2002, with pro forma plant additions through December 31, 2002. As Staff agrees, this was also consistent with Decision No 61831. Carlson DT at 12.

Q. DID STAFF AGREE WITH THE INCLUSION OF THESE PLANT ADDITIONS THROUGH DECEMBER 31, 2002?

A. Yes, Mr. Carlson explains why Staff accepted the Company's proposal to include non-revenue producing plant additions completed and placed in service by December 31, 2002. Carlson DT at 14-16.

Q. DO YOU AGREE WITH RUCO'S TESTIMONY (MOORE DT AT 2) THAT "A LARGE PERCENTAGE OF THE INFORMATION PROVIDED BY THE COMPANY WAS IRRELEVANT, STALE, INCOMPLETE, NON-VERIFIABLE, POORLY FORMATTED, SUSPECT AND/OR UNTIMELY"?

A. No. Frankly, the RUCO witness, Mr. Moore, is exaggerating the circumstances in these proceedings, and mischaracterizing the information provided by the Company. Mr. Moore states that over 300 questions on 39 sets of data requests, numerous telephone conversations and several face-to-face meeting were held, illustrating that there were problems with the data provided by the Company. Moore DT at 2-3. This is absurd given that such discovery would be expected in a

rate case involving 10 separate operating water and wastewater districts, all of which have not had rate cases filed with test periods on or before 1995. In some districts, there has not been a rate case filed since 1988. I am not sure what Mr. Moore expected.

Q. WOULD THE SITUATION MR. MOORE COMPLAINS OF HAVE BEEN IMPROVED IF ARIZONA-AMERICAN WAITED TO FILE BASED ON A LATER TEST YEAR?

A. No, it would not have been any better had the Company waited to file. In fact, it would have been much worse. All of the information Mr. Moore refers to is plant-related data. All of the historical plant data had to come from Citizens, and the longer the Company waited the more likely that the data would have not been available. The Company had a working arrangement with Citizens for a period of one year after the close of the sale. Citizens bent over backwards to provide all of the data that they had available, however, Citizens is no longer in the water and sewer service business. Some of the historical data had been purged from their systems prior to the Citizens' Acquisition. By way of comparison, in the Paradise Valley rate case filed in 1989, there were over 1200 data requests and sup-parts, even though Paradise Valley is just one operating district serving approximately 4,500 customers.

Q. MR. MOORE ALSO STATES THAT HE SPENT NUMEROUS HOURS TRYING TO RECONCILE THREE DIFFERENT BILL COUNTS. IS THAT INAPPROPRIATE?

A. Not in the least. Again, there are 10 separate operating districts seeking rate relief in this case, many with diverse tariffs, and several of these have not been through rate proceedings in more than a decade. The rates for some of the districts, which the Commission approved, are quite complicated. The Company inherited three

rate structures, and also spent a considerable amount of time dealing with them. The bottom line is, again, that this is a complicated rate case. Consequently, Mr. Moore's complaints have no basis.

Q. DO YOU AGREE THAT MUCH OF THE DATA CONTAINED IN THE FILING WAS NOT RELEVANT BECAUSE ARIZONA-AMERICAN DID NOT OWN THESE DISTRICTS DURING THE TEST PERIOD OF 2001?

A. No, I do not agree. The fact is that operation and maintenance expenses are incurred in each of these districts and are materially similar whether under Citizens' or Arizona-American's ownership. The rate base at the district level also did not materially change with the change in ownership. Further, although administrative and general costs, i.e., overhead from the parent and/or affiliated service providers, will differ depending on how the parent wishes to administer all operations, this merely supports the pro forma adjustments recommended by RUCO and the Company, i.e., use of the 2002 recorded data for Arizona-American's corporate and Service Company charges. Again, I will emphasize that this has no impact on the plant and district level operating expenses of each of the districts.

Q. MS. DIAZ-CORTEZ STATES, HOWEVER, THAT THE ESTIMATES USED BY THE COMPANY TO REPLACE THE CITIZENS' MANAGEMENT FEES WERE CLEARLY SPECULATIVE. DOES RUCO REALLY AGREE WITH THE USE OF THE SERVICE COMPANY FEES IN 2002 TO DETERMINE THE REVENUE REQUIREMENT?

A. Yes. Ms. Diaz-Cortez is correct that the filing contained estimated numbers for the Service Company and corporate charges. This was a timing issue later corrected when the Company, as part of its responses to data requests, provided the actual 2002 charges to all parties requesting such information, including Staff and

RUCO. These actual expenses are obviously not speculative. These recorded 2002 charges would not change and certainly are not reasonably considered speculative. In fact, as provided in an analysis by Mr. Bourassa in his rebuttal testimony, the estimated charges Arizona-American provided in the filing are extremely close to the actuals recorded by Arizona-American for 2002. Therefore, I would suggest that Arizona-American is not basing its request for the rate relief on estimates or speculation, but on accepted ratemaking principles including using pro forma adjustments to normalize for known and measurable changes. See A.A.C. R14-2-103(A)(3)(i).

Q. WHAT ABOUT COMPLAINTS THAT IT WAS TIME CONSUMING TO ANALYZE THE 2002 DATA OF THE SERVICE COMPANY?

A. I would expect that it would be. It should always take time to analyze data to ensure that proper charges were allocated to each district. I applaud RUCO for their analysis and their conclusion that AWW properly allocated costs to Arizona, as must be the fact since they determined that the recorded costs in 2002 for the Service Company were appropriate. Direct Testimony of Marylee Diaz-Cortez ("Diaz-Cortez DT") at 21-22; see also Rebuttal Testimony of Thomas J. Bourassa ("Bourassa RBT") at 20-27 (explaining inappropriate adjustments made by RUCO in their determination of the appropriate level of expense).

Q. DO YOU AGREE WITH MR. MOORE THAT A PROBLEM EXISTED WITH THE COMPANY PROVIDING THE COMMISSION'S APPROVED 1995 PLANT BALANCES?

A. I agree that there was a problem in understanding the prior Commission decision and that the Company may have been unable to provide every possible piece of evidence concerning plant costs. However, as discussed above, the longer the Company waited to file a case, the worse this situation would have been. As

explained earlier, both Citizens and AWW provided all the data they could in the most expeditious manner. If Arizona-American had deferred the rate case, much less data and assistance would have been available from Citizens.

Q. DO YOU AGREE THAT MANY PLANT ENTRIES AND RETIREMENTS HAD TO BE ANALYZED WITHOUT VERIFICATION DUE TO A LACK OF SOURCE DOCUMENTS?

A. Again, there was some source documentation that was not available from Citizens. However, in my view, this comes down to a lack of trust on RUCO's part. The computer documentation that was available was provided. Citizens provided all documentation that was necessary to verify that expenditures were made for plant additions in each and every year. Under any practical auditing methodology, I firmly believe that more than sufficient information was provided to determine appropriate capitalization of assets from the last test period to the current test year for each district.

Q. BUT WOULDN'T THE CLAIMED LACK OF SPECIFIC ALLOCATION FACTORS RUCO DISCUSSED CREATE PROBLEMS IN DETERMINING THE PROPER LEVEL OF EXPENSE CHARGED TO EACH OPERATING DISTRICT?

A. Absolutely not. Arizona-American does not specifically allocate Service Company charges or general corporate charges to each operating district. Instead, Arizona-American has a corporate district to which all of these costs are charged. The Company did explain how it suggested allocating the charges to each of the districts based on very specific factors. This information was provided in the initial filing. All parties have the right to differ on how charges should be allocated, but it is clearly the obligation of each party to do its own analysis if it disagrees with the Company's proposal. If RUCO suggests that it created more

work for them to due their own allocation, RUCO may need to consider their own methodology. This does not mean, however, that the Company's allocation methodology was inadequate or improper.

Q. MR. STEPHENSON, DOES THAT MEAN YOU AGREE WITH RUCO'S CONTENTION THAT (MOORE DT AT 4) "ANY DETERMINATION OF THE RATEMAKING ELEMENTS BASED ON THIS APPLICATION AS FILED WOULD NOT ACCURATELY REPRESENT THE ACTUAL PRESENT VALUE OF RATE BASE, OPERATING INCOME, OPERATING EXPENSES AND/OR REVENUE REQUIREMENT"?

A. Again, absolutely not. RUCO simply wishes to delay rate increases as long as possible. The rate base determination is as accurate as humanly possible given the length of time between filings and the closing of Citizens water and sewer operations. Operating income is no more than the subtraction of revenues and expenses. Operating revenues were verified by all parties as accurate. Operating expenses were the recorded cost of the operating districts for the historical test period. Operating expenses of the Service Company and AWW Corporate Office were the actual costs for 2002, and are reflective of the current operating philosophy of the parent, as RUCO agrees. Diaz-Cortez DT at 21-22.

IV. <u>ACQUISITION ADJUSTMENT</u>

Q. STAFF AND YOUNGTOWN HAVE BOTH SUGGESTED THAT THE COMPANY HAS INAPPROPRIATELY INCLUDED THE "PREMIUM" THAT THE COMPANY'S PARENT, AWW, PAID IN THE CITIZENS' ACQUISITION TO CITIZENS AS PART OF RATE BASE. DO YOU AGREE?

A. Not really. As a preliminary matter, I should note that the "premium" is really not a premium. Instead, it is the difference between the recorded book costs, less

depreciation, of Citizens' utility plant and assets and the purchase price negotiated between Citizens and Arizona-American and its parent, AWW. The purchase price reflected the current value of Citizens' utility plant and assets. For accounting purposes (not valuation purposes), an acquisition adjustment or "premium" is recorded on the books of Arizona-American based on the purchase price paid.

In its direct filing, the Company did mistakenly include the recovery **of** the acquisition premium through amortization as part of depreciation expense. This was inappropriate due to the fact that the Company was not requesting that the revenue requirement in these applications be based on the inclusion of a return **on** the premium. This has been corrected by removal of the return **of** the premium (amortization) in the revenue requirement. The Company **did not** include a return **on** the premium in the revenue requirement. The Company, according to the Arizona Constitution, has requested that its rates be determined based on the "fair value" of its utility plant and property at the time rates are set. The Company has not included any acquisition adjustment or premium in its fair value rate base ("FVRB").

Q. SO YOU AGREE THAT THE COMPANY IS, BY COMMISSION ORDER, "REQUIRED TO DEMONSTRATE THAT CLEAR, QUANTIFIABLE AND SUBSTANTIAL NET BENEFITS TO RATEPAYERS HAVE RESULTED FROM THE CITIZENS' ACQUISITION THAT WOULD NOT HAVE BEEN REALIZED HAD THE TRANSACTION NOT OCCURRED BEFORE THE COMMISSION WILL CONSIDER RECOVERY OF ANY ACQUISITION ADJUSTMENT IN A FUTURE RATE PROCEEDING"?

A. Yes, in accordance with Decision No. 63584, as I clearly discussed in my direct testimony. I further explained that Arizona-American has not attempted to prove

the net benefits at this time. Obviously, we have provided a showing of what net benefits might be expected, and as shown later in this testimony, we do have a reasonable idea of the quantity of some of those benefits, but an acquisition adjustment is not requested in this case.

Q. SO YOU DISAGREE WITH STAFF THAT ARIZONA-AMERICAN IS PROPOSING TO RECOVER THE ACQUISITION ADJUSTMENT BY INCLUDING IT IN THE ORIGINAL COST RATE BASE?

A. I strongly disagree with Staff, which is merely attempting to conceal their rejection of fair value ratemaking. The Company has included an acquisition adjustment in the recorded historical original cost plant because it is required under any acceptable regulatory accounting methodology. This is the recorded plant balance on the books of the Company, and it has to be shown as part of the historical data. However, the Company has not requested that the revenue requirement be based on its original cost rate base as explained throughout our direct filing. Instead, we have requested a revenue requirement based on FVRB, **excluding** the acquisition adjustment.

Q. HOW DOES THE COMPANY RESPOND TO STAFF'S CLAIMS THAT THERE ARE MANY ISSUES TO CONSIDER BEFORE ARIZONA-AMERICAN SHOULD BE ALLOWED TO RECOVER ANY PORTION OF THE ACQUISITION ADJUSTMENT?

A. Staff's comments raise several issues. The first of which was the "gain" Citizens received on the sale. I do not agree that the gain is to be considered in the context of a demonstration of the benefits because the Citizens' "gain" and the acquisition adjustment are two completely different items. The "gain," whatever it may or may not be, belongs to Citizens. If the Commission thought that "gain" should be shared, it would have done so as a condition at the time of approval of the sale;

RUCO argued for such treatment at that time. The Commission has ruled that the "gain," whatever it may be or not be, is to be retained by Citizens. Thus, the acquisition adjustment is all that should be considered. Besides, it is important to keep in mind that to the extent that there was any "gain," **Citizens** obtained the benefits from it – not Arizona-American.

I do agree with Staff that the mere change in ownership is not sufficient justification for increasing rates by providing for the revenue requirement on an acquisition adjustment. However, I disagree that the acquisition harmed ratepayers due to the elimination of accumulated deferred taxes and investment tax credits. In fact, by year four after the transaction, Arizona-American will have greater deferred taxes on its books than would have been recorded on the books and records of Citizens because the acquisition adjustment will be amortized over 40 years for book purposes as compared to 15 years for tax purposes. Based on the Company's requested use of the mortgage style amortization, very little book amortization would be recorded in the initial years. The approximate balance of the deferred taxes in year four, due solely to the acquisition adjustment, will total over $6.5 million. See Stephenson Rebuttal Exhibit 2.

Staff has also testified that the Company's overhead costs are higher than Citizens, another detrimental effect. This is simply not true. When normalized, Arizona-American actually has lower overheads than Citizens. Bourassa RBT at 24-25.

Finally, Staff claims that the benefits derived would not have been obtainable by Citizens. This point is simply speculation. There is no way to know what Citizens would or would not have obtained at some unknown time in the future. However, since the Company has not undertaken any study on that aspect to this point, I do not believe it has any relevance at this time.

Q. ARE THERE ANY OBVIOUS NET BENEFITS FROM THE TRANSACTION THAT HAVE ALREADY BEEN REALIZED BY RATEPAYERS?

A. Yes, all parties to this case have already recognized a substantially lower cost of capital due to the acquisition. In fact, as I will show later in this testimony, this is one example of the Staff picking and choosing the lowest cost of service components, irrespective of their stated position that all components of the test period must match using historical data. See, e.g., Direct Testimony of Joel M. Reiker ("Reiker DT") at 3-4. The Company has proposed in these filings to use the capital structure and the cost of debt after acquisition. The current capital structure is composed of over 60 percent debt, in comparison to Citizens' historical capital structure of only 49 percent debt. Citizens' imbedded cost of debt was approximately 7 percent compared to that recommended by Staff in this case for the Company of 4.59 percent. These two items alone produce a cost of capital for Citizens based on their historical debt/equity ratios and using Staff's suggested 9.7 percent cost of equity of over 8.3 percent. Staff has recommended a rate of return on rate base for the Company of 6.6%. This is 170 basis points lower than that which would have been used by Citizens. Using Staff's recommended, albeit improper, original cost rate base of over $91.5 million and a gross revenue conversion factor of 1.63, the Company has reduced the revenue requirement by over $2.2 million due to the Citizens' acquisition. Staff, and all other parties criticizing Arizona-American, have failed to mention this benefit, despite using this post-acquisition capital structure in the development of their revenue requirement. I will speak further to the cost of capital components later in this testimony.

Q. YOUNGTOWN'S CONSULTANT TESTIFIES (BURTON DT AT 10) THAT THE ACQUISITION ADJUSTMENT "SEEKS" TO ADJUST THE UTILITY'S BOOKS SO THAT THE PLANT'S BOOK VALUE IS CLOSER TO THE AMOUNT PAID BY THE WILLING BUYER. DO YOU AGREE?

A. No, I do not agree. As I explained, the acquisition adjustment is the difference between the purchase price paid and the book value of the assets purchased, period. According to every accounting standard I am aware of, the purchase must be recorded in a manner that reflects the total price paid for the assets. It follows that the acquisition adjustment has to be recorded in the original cost records as the difference between the price paid and the book cost of the assets acquired. It would appear that Youngtown's consultants are mistakenly confusing the book treatment of the acquisition adjustment with the ratemaking treatment. Recording for book purposes is, however, immaterial to ratemaking treatment, as I explained.

Q. YOUNGTOWN'S WITNESS FURTHER TESTIFIES (BURTON DT AT 9) THAT "IF THE FVRB BASED ON RCND CAUSES RATES TO BE HIGHER THAN WHAT THEY WOULD BE UNDER A STRAIGHT OCRB APPROACH AS IN THIS CASE, THEN THE UTILITY MUST DEMONSTRATE A PUBLIC BENEFIT JUSTIFYING THE USE OF RCND IN THE FVRB DETERMINATION." DO YOU HAVE ANY COMMENT ON THIS TESTIMONY?

A. This is an unsupported legal argument. I am not surprised that Youngtown's consultants do not understand Arizona law, however, as they admitted in responses to the Company's data requests they have no experience with rate making in Arizona or, for that matter, anywhere that follows the "fair value" approach. See Stephenson Rebuttal Exhibit 1(Youngtown Response to Data Request 1.1d). I am not a lawyer but I understand that the Arizona Constitution obligates the

Commission to determine the fair value of Arizona-American's property and to use that finding in setting rates. I am not aware that this constitutional mandate applies only if the utility shows "ratepayer benefit" from a fair value finding, as Youngtown's witnesses seem to believe.

It also appears that Youngtown's witnesses may believe that fair value is determined by including the acquisition adjustment in the original cost rate base. The Company did not propose such a determination, nor is it, to my knowledge, required by any applicable statute, law or rule. Therefore, Youngtown's "straw-man" methodology should be rejected.

Q. SHOULD THE COMPANY'S REQUEST FOR ACCOUNTING TREATMENT OF THE ACQUISITION ADJUSTMENT BE DEFERRED?

A. No, Youngtown is wrong in this regard as well. Direct Testimony of Michael G. Burton ("Burton DT") at 12-13. The request for the accounting treatment of the acquisition adjustment is entirely independent of whether or not the Commission will grant the acquisition adjustment in rates, when and if the Company makes such a request. Financial Accounting Board Standard ("FAS") 71 requires that any utility seeking a book treatment different from that required under normal accounting obtain a Commission order allowing the different treatment.

Consistent with FAS 71, and as explained in my direct testimony, the Company is seeking Commission approval to amortize the acquisition adjustment over 40 years using a mortgage style amortization. If the determination is not made in this case, again as I stated in my direct testimony, the Company will have to amortize the acquisition adjustment over 40 years on a straight-line basis leading to a mismatch with the distribution of any of the benefits that could and will be proven.

Q. DOES THE DETERMINATION OF THE ACCOUNTING TREATMENT

HAVE ANY RELATIONSHIP TO THE DETERMINATION OF NET BENEFITS?

A. No, the approval of the recovery period and method pertains specifically to the book treatment, not necessarily ratemaking. As I stated earlier, the Company must have this determination to vary from normal accounting treatment.

Q. IS IT LOGICAL AND APPROPRIATE TO DETERMINE THE DOLLAR VALUE OF THE ACQUISITION ADJUSTMENT BEFORE THE ACCOUNTING TREATMENT?

A. Yes it is. I agree with Youngtown's consultants on this point. However, contrary to the Youngtown consultant's claims, the dollar value of the acquisition adjustment is known and is recorded in the books and records of the Company. I am unaware of any reason that the accounting treatment has to be delayed until a determination of the acquisition adjustment is finalized for ratemaking purposes. As stated above, book treatment and ratemaking treatment are two separate and essentially unrelated matters. Thus, the treatment of the acquisition adjustment for book purposes is appropriate in this case, irrespective of the future ratemaking treatment.

Q. SHOULD THE ACQUISITION ADJUSTMENT BE ALLOCATED TO EACH OF THE COMPANY'S OPERATING DISTRICTS BASED ON NET PLANT?

A. No, this is yet another unsupported assertion of Youngtown's consultants. Direct Testimony of Andrew J. Burnham ("Burnham DT") at 9-10. Arizona-American's parent company, AWW, has allocated the acquisition adjustment to each of the states where assets were purchased from Citizens. The methodology adopted in each of these states called for allocation of the acquisition premium based on gross plant. The methodologies at the parent level and the state level have to be

consistent. To adopt a different method at this point to suit a particular party's ratemaking objectives is inappropriate and unwarranted.

V. AMERICAN WATER WORKS OVERHEADS AND SERVICE COMPANY CHARGES

Q. DO YOU AGREE WITH RUCO THAT SERVICE COMPANY COSTS, GENERAL OFFICE COSTS AND OVERHEADS BASED ON 2002 ACTUALS SHOULD BE USED IN DETERMINING THE REVENUE REQUIREMENT IN THIS CASE?

A. Yes, with adjustments to reflect the normalized actual amounts recorded in 2002. Mr. Bourassa discusses the particular expenses in his rebuttal testimony. Bourassa RBT at 20-27.

Q. THEN YOU DISAGREE WITH THE STAFF RECOMMENDED USE OF CITIZENS' 2001 RECORDED EXPENSES?

A. The Company strenuously disagrees with Staff on this point. Use of Citizens' recorded administrative expenses in 2001 is inappropriate for a number of reasons. First, these Citizens' expenses bear no relation to the administrative and general management expenses the Company will incur during the time the new rates will be in effect. Second, as explained by Mr. Bourassa, the amounts recorded by Citizens during the test year are extraordinary and irregular. See Bourassa RBT at 24. In other words, and consistent with the Commission's rules, and its customary practice, pro forma adjustments are required to obtain a normal or more realistic relationship between revenues, expenses and rate base for the test year. See A.A.C. R14-2-103(A)(3)(i).

Q. WOULD YOU PLEASE SUMMARIZE THE REASONS THAT THE CITIZENS' OVERHEAD AND SERVICES CHARGES IN 2001 ARE NOT REFLECTIVE OF A NORMAL LEVEL OF EXPENSE, EVEN FOR

CITIZENS?

A. As Mr. Bourassa explains, Citizens' charges for these expenses in 1999 and 2000 were significantly higher. In fact, the average of the 1999 and 2000 charges is over $1.3 million higher than the pro forma charges from 2002 the Company proposed to use. The reason for this large disparity in Citizens charges in 2001 is clearly due to the pending sale of their water and sewer assets. Citizens was winding down its operations and eliminated various personnel and expenses as it transitioned toward a telecommunications utility. This included management personnel, benefits and other vital management services.

Again, proper ratemaking calls for adjustments for known and measurable occurrences. This is obviously a known and measurable occurrence, as reflected by the significant decrease in Citizens' expenses from 1999 and 2000 to 2001, when the sale was pending. This casts serious doubt as to whether the extraordinarily low Citizens overheads and other service charges Staff's seeks to utilize for setting rates have any realistic relationship to the charges the Company will incur during the period the rates are in effect.

Q. ARE THERE ANY OTHER REASONS WHY IT IS INAPPROPRIATE TO USE CITIZENS' RECORDED EXPENSES FOR ADMINISTRATIVE AND GENERAL MANAGEMENT UNDER ARIZONA-AMERICAN AND AWW'S OWNERSHIP?

A. Quite simply, Citizens no longer owns and operates any of the water and wastewater operations at issue in this proceeding. The expenses allocated to these districts by Citizens' management have no relationship to the expenses that will incurred by Arizona-American to provide water and wastewater utility service in these districts at the time the rates will be in effect.

Q. BUT, MR. STEPHENSON, HAVEN'T ALL PARTIES CONSISTENTLY

PROPOSED THE USE OF THE RECORDED EXPENSES FOR ALL OTHER EXPENSES?

A. Yes. However, as explained above, the operation and maintenance (O&M) expenses charged directly to each of the Arizona-American districts will not materially change. Thus, the O&M expenses actually recorded in 2001, the test year, are, for the most part, known and measurable expenses, and should be matched with 2001 revenues. The Service Company charges, AWW General Office charges and overheads for 2002 are not dependent on the revenues or other expenses charged directly to each of these districts to supply utility service at the district level and are now known and measurable.

Q. WHAT ABOUT STAFF'S CLAIM THAT THE AWW EXPENSES ARE NOT KNOWN AND MEASURABLE?

A. It appears that Mr. Igwe, the Staff witness who provided this testimony, is basing this view on the Company's original filing, which necessarily used an extrapolated 12 month average for Service Company and AWW overhead charges based on the recorded level of expense from April 2002 through July 2002. I agree that the actual 2002 costs were not precisely known and measurable until year-end 2002. However, following acceptance of the filing by Staff in January 2003, the **actual costs** for the year 2002 were known and were provided to Staff during the discovery and audit process. This same data was provided to RUCO, which, unlike Staff, recognized that the Citizens' data bears no relationship to the Company's expenses on a going-forward basis.

Q. HOW DOES THE COMPANY RESPOND TO MR. IGWE'S SUGGESTION THAT THE GOING FORWARD MANAGEMENT COSTS SHOULD BE REJECTED ABSENT A COMMENSURATE BENEFIT TO RATEPAYERS BECAUSE THERE IS A SIGNIFICANT DIFFERENCE WHEN

COMPARED WITH THE CITIZENS 2001 NUMBERS?

A. First, I know of no regulatory rule or accepted method that requires the demonstration of "benefits" due a known and measurable change in going forward expenses. Staff is also unaware of any authority for Mr. Igwe's testimony. See Stephenson Rebuttal Exhibit 1 (Staff Responses to Data Request 2.32 and 2.33). Indeed, applying Staff's logic, it would be improper to adjust purchased power expense or payroll tax expense based on known changes in these expenses because customers don't "benefit" from them. This is contrary to A.A.C. R14-2-103(A)(3)(i). Further, Staff cannot show how its adjustments provide a commensurate benefit to ratepayers, beyond lower rates. Id. In any event, the Company has the obligation to show the appropriate level of expense and further to demonstrate that the costs are necessary to the provision of service. No party to this case has questioned any of the Company's particular expenses relative to the going-forward administrative costs.

Second, and perhaps more importantly, as explained above, the level of expenses recorded on the books and records of Citizens in 2001 is not commensurate with the normal operation of the districts at issue in this proceeding. In fact, the 2001 expenses do not even correspond to Citizens' actual expenses in 1999 and 2000. Thus, they have no bearing on the determination of rates in this proceeding.

Q. DO YOU AGREE WITH THE STAFF'S PROPOSAL TO USE THE LEVEL OF WAGES, SALARIES AND BENEFITS AS RECORDED ON THE BOOKS AND RECORDS OF CITIZENS IN 2001?

A. No, for the same reason that I disagree with the Staff's proposal to use Citizens' recorded administrative and general recorded costs from 2001. Included in the recorded salaries, wages and benefits are the costs related to employees who no

longer provide any water and wastewater related services to ratepayers in the 10 operating districts at issue in this case. These employees were terminated at the time of the acquisition, or before, as a result of the purchase of the Citizens' assets. The recorded expenses in 2001 do not reflect known and measurable information relative to Arizona-American's costs of providing service following the change in ownership. Nor does the recorded level of expense include annualized levels based on an entire year of operation. Citizens terminated many employees before the closing of the purchase by AWW. These terminated employees' positions and jobs were replaced in the organization by a portion of the increase in administrative fees. Because Staff didn't annualize the recorded level of expense in 2001, they have understated the actual Citizens' expense to manage and operate these systems.

Finally, one other point should be considered. In April 2002, all of Arizona-American's employees were granted their annual salary adjustment, a fact ignored by Staff. This is obviously a known and measurable change typically considered in the determination of the revenue requirement. The Company, therefore, made a pro forma adjustment to annualize wage, salary and benefit levels based on the actual number of employees after the completion of Citizens' acquisition and the known and measurable level of each of these items at the time of filing.

Q. DO YOU HAVE OTHER COMMENTS TO MAKE ABOUT STAFF'S RECOMMENDATION AS IT RELATES TO ADMINISTRATIVE COSTS, SALARIES, WAGES AND BENEFITS?

A. Yes, another point Staff repeatedly makes is that all of the items contained in the revenue requirements have to be matched to the appropriate period. Yet, Staff conveniently ignores this concept when it chooses. For example, Staff claims that

the 2001 recorded salaries, wages and benefits are the only known and measurable amounts. It was obvious that the 2002 amount was known to Staff well before they filed their direct testimony and schedules, just like the pro forma plant additions for 2002 Staff allows because they were known and measurable during the same time period. These plant items were recorded on the same 2002 books and records of the Company as the recorded administrative expenses and salaries and benefits. Moreover, Staff used the December 31, 2002 actual capital structure of the Company (with minor adjustments) in the determination of the cost of capital, and accepted the Company's proposed adjustment to revenues for the Anthem district to include in-lieu revenue payments by Del Webb that will not begin until 2004. The latter adjustment goes well outside the test year.

Q. DO STAFF'S RECOMMENDED POSITIONS HAVE ANY COMMON THREAD?

A. Unfortunately, yes. Frankly, it seems impossible to escape the conclusion that Staff is picking and choosing those expenses that result in the lowest possible revenue requirement. This is the only common thread between all of these otherwise inconsistent positions.

Q. DO YOU HAVE ANY OTHER COMMENTS ON THE ISSUE OF PRO FORMA ADJUSTMENTS?

A. Yes, I have one other item to note. Staff has removed Citizens' customer billing plant from the recommended rate base. However, they have not recommended allowance of any of the AWW administrative costs that contain the billing costs. This basically eliminates any of the costs of the billing assets from consideration in the revenue requirement. Again, this is inconsistent as well as inappropriate.

VI. <u>RATE CASE EXPENSE</u>

Q. DO YOU AGREE WITH ANY OF THE OTHER PARTIES'

RECOMMENDATIONS CONCERNING THE APPROPRIATE LEVEL OF RATE CASE EXPENSE?

A. I agree with Staff that the Company's requested rate case expense is appropriate. The Company requested that it be allowed to include in the revenue requirement $715,000 of rate case expense amortized over 3 years. Staff has recommended approval of this request.

Q. WHAT HAS RUCO RECOMMENDED?

A. RUCO recommends that the level of expense be reduced to $418,941 amortized over 3 years. This recommendation is based on RUCO's comparison of Citizens' authorized level of rate case expense from in their last rate decision, issued in 1997 and inflated to today's costs. However, as noted by RUCO, Citizens only filed applications for six of its districts in the last case, a little over one-half of the districts filed in this case. Obviously, the greater the number of districts involved in the rate case, the greater the expense will be. Additionally, the level of rate case expense is dependent on a multitude of factors, including customer notices, use of outside consultants, intervenors, and other items, such as the number and magnitude of the issues in dispute. RUCO's straight-line comparison, unadjusted for anything but inflation, ignores all of these factors.

Q. WHY SHOULD THE COMMISSION CONSIDER AN INCREASE IN THE LEVEL OF CONSULTANT CHARGES?

A. Because Citizens employed specific individuals who were assigned the task of prosecuting rate applications. All of these charges were included in the management fees charged to the districts. This is not the case for AWW and Arizona-American. All of the salaries of these Citizens' employees were eliminated after the Citizens' Acquisition. The outside consultants, including attorneys, are retained to replace the employees that had previously been used in

Arizona to prosecute rate applications and handle other regulatory matters making RUCO's comparison methodology inappropriate.

Q. CAN I THEREFORE ASSUME THAT YOU DISAGREE WITH RUCO THAT THE COMPANY'S RECOMMENDED LEVEL OF EXPENSE IS EXORBITANT?

A. I strongly disagree. As I demonstrated in my direct testimony, it is lower than the per customer cost that the Company has historically been allowed in its prior two cases. The prior historical allowance was $13.25 and the Company's proposal in this case is $7.39 per customer. Viewed in this light, this is hardly exorbitant, especially when it is considered amortized over three years, or $2.46 per customer annually.

Q. ARE THERE ANY OTHER RELEVANT CONSIDERATIONS WITH RESPECT TO THE APPROPRIATE LEVEL OF RATE CASE EXPENSE?

A. There is one other significant factor that must be considered. It has been at least 7 years between rate filings for most of these districts, and no rate filing has ever been made for Anthem. This alone makes the case more complex and time consuming, as all parties have noted in their testimony. The time between filings requires detailed explanations of all plant expenditures since the time of the previous filing. Additionally, some of the prior applications were based on test periods in the 1980's, requiring even more time.

Q. DO YOU AGREE WITH YOUNGTOWN THAT RATE CASE EXPENSE SHOULD BE AMORTIZED OVER 5 YEARS?

A. No. This recommendation is based on the fact that it has been a long time in between rate filings for these districts. I agree that it has been a long time. However that was the track record of Citizens, not AWW. AWW has a track record of filing rate cases much more often. The Paradise Valley water district of

Arizona-American filed applications for rate increases 5 times in an 8 year period, or one every 1.6 years. Moreover, the new arsenic treatment requirements will require a significant plant investment prior to January 1, 2006, or in less than 3 years, which will likely lead to new rates cases being filed in less than five years. In short, the next rate application will likely be filed at the first possible opportunity.

VII. COST OF DEBT AND CAPITAL STRUCTURE

Q. DO YOU AGREE WITH THE STAFF'S RECOMMENDATION CONCERNING THE EMBEDDED COST OF DEBT?

A. No, I do not agree with their recommendation for four specific reasons: 1) they should not have included the Tolleson bonds in their analysis; 2) they should have included the most recent cost of the Maricopa IRDB's; 3) they should have included the current amount of the short-term debt at current long-term costs; and 4) they should have included all of the Company's debt, including the PILAR agreements.

Q. PLEASE EXPLAIN WHY THEY SHOULD NOT HAVE INCLUDED THE TOLLESON BONDS.

A. These bonds are not debt of the Company. These are bonds issued by the City of Tolleson for construction of improvements to their own wastewater system. The Company pays for the costs of these improvements through the fees it pays to Tolleson for wastewater services under its contract with Tolleson. These costs are included in current operating expense and as such have no bearing on the capital structure of the Company.

Q. WHY SHOULD THE CURRENT KNOWN COST OF THE MARICOPA BONDS BE INCLUDED IN THE EMBEDDED COST OF LONG-TERM DEBT?

A. The Company should be reimbursed for whatever its current cost is of this debt. In this case, the Staff should have updated the cost of this floating issue through at least July 2003. The rate of this debt at July 31, 2003 was 1.28%. This is the rate that should have been used in the capital structure.

Q. WHY DO YOU BELIEVE THAT THE STAFF SHOULD HAVE INCLUDED THE SHORT-TERM DEBT AS OF DECEMBER 31, 2002 IN THE CAPITAL STRUCTURE AT CURRENT LONG-TERM DEBT RATES?

A. Staff has allowed non-revenue producing plant additions for 2002 to be included in plant in service. The short-term debt was incurred to finance these long-term capital assets. Staff should match the capital structure of the Company to the allowed capital investment. The rates that should be used on this debt are the latest estimates of what the Company will pay at the time of the issuance in November 2003. That rate is estimated to be 6.00%. Additionally, Staff realizes that the Company has a financing application filed with this Commission to refinance the total outstanding short-term debt. That application was filed on August 14, 2003, and is being reviewed by Staff. This has to be considered in the overall capital structure.

Q. WHY SHOULD THE STAFF HAVE INCLUDED THE PILAR AGREEMENTS IN THE CAPITAL STRUCTURE OF THE COMPANY?

A. The Company entered into several "PILAR" agreements with developers under which the developers effectively finance the construction of utility plant for the Paradise Valley water district. As part of these agreements, the Company issued promissory notes to the developers, which constitute long-term debt obligations of the Company. As such, these promissory notes should be included in the Company's long-term debt if the entire Company capital structure is to be used.

Staff states that the capital structure should include the Company-wide cost of debt. Reiker DT at 4. I agree with this, but Staff failed to do so in its calculations.

Q. HAVE YOU RECALCULATED THE WEIGHTED COST OF EMBEDDED DEBT BASED ON YOUR ABOVE RECOMMENDATIONS?

A. Yes, I have. That analysis is attached hereto as Stephenson Rebuttal Exhibit 3, which shows that the Company's weighted cost of embedded debt, based on the Company's total long-term indebtedness at December 31, 2002, should be 4.86%.

Q. DO YOU AGREE WITH RUCO'S PROPOSED APPROACH TO THE EMBEDDED COST OF LONG-TERM DEBT?

A. No, I have the same issues with RUCO's approach as I do with that of Staff. I believe that the embedded cost of long-term debt should be as I have stated above, or 4.86%, if the Company's current capital structure is to be used.

Q. DO YOU AGREE WITH MR. REIKER'S USE OF THE "ACTUAL" CAPITAL STRUCTURE AS OF DECEMBER 31, 2002 FOR ARIZONA-AMERICAN?

A. No. Again, to reemphasize the point made above, Mr. Reiker has not included all of the Company's actual long-term debt and instead has erroneously included short-term debt financing construction projects and the City of Tolleson's bonds, which are not debt of the Company. Moreover, as I have previously testified, it is Arizona-American's intention to retain a capital structure as close to 60% debt and 40% equity as possible. Accordingly, it is more appropriate to use this 60% - 40% ratio of long-term debt to equity in setting rates in this proceeding.

VIII. ARIZONA-AMERICAN'S FINANCIAL INTEGRITY

Q. THE STAFF COST OF CAPITAL WITNESS, MR. REIKER, TESTIFIES THAT HIS RECOMMENDED RATE OF RETURN WILL ALLOW ARIZONA-AMERICAN TO MAINTAIN ITS FINANCIAL INTEGRITY.

DO YOU AGREE WITH MR. REIKER?

A. I do not agree with Mr. Reiker.

Q. ON WHAT BASIS DOES MR. REIKER TESTIFY THAT STAFF'S RECOMMENDATION WILL ALLOW ARIZONA-AMERICAN TO MAINTAIN ITS FINANCIAL INTEGRITY?

A. On pages 30-31 of his direct testimony, Mr. Reiker argues that Staff's recommended rate of return on rate base results in a pre-tax interest coverage ratio of 3.2. Mr. Reiker goes on to explain:

> Interest coverage is one of the determinants of a company's bond rating – a higher ratio of earnings to interest results in a higher bond rating. According to Standard & Poor's ("S&P") 2002 Corporate Ratings Criteria, the median interest coverage ratio for an 'A' rated U.S. electric utility (Staff's most available proxy for a water company) is 3.4.

Reiker DT at 30-31. I agree with Mr. Reiker that interest coverage is an important determinant of a company's bond or credit rating and, more generally, its financial integrity. In addition, although I have not reviewed the particular S&P document cited by Mr. Reiker, I agree with Mr. Reiker that a water utility would be expected to maintain an interest coverage ratio of approximately 3.4 in order to maintain a credit rating of A or higher.

However, I certainly disagree with Mr. Reiker's attempt to show that Staff's recommended rate of return of only 6.6%, which is approximately equal to the current interest rate on an investment-grade utility bond, produces pre-tax interest coverage of 3.2 in this case. In fact, under Staff's recommendation, Arizona-American's interest coverage will be slightly more than 1.0.

Q. WHAT IS A PRE-TAX INTEREST COVERAGE RATIO AND WHY IS IT A GOOD INDICATOR OF A COMPANY'S FINANCIAL INTEGRITY, AS MR. REIKER STATES IN HIS TESTIMONY?

A. A pre-tax interest coverage ratio is the ratio of operating income and income taxes to interest on bonds and other long-term debt in the company's capital structure. This ratio indicates how many times interest charges have been earned by the company on a pre-tax basis. Since the failure to meet interest payments on debt would constitute a default, the interest coverage ratio measures the company's margin of safety. For example, if a utility's operating income before payment of income taxes is equal to $250,000, its income taxes totaled $70,000 and its annual interest payments totaled $100,000, the utility's pre-tax interest coverage ratio would be 3.2 ($320,000 divided by $100,000). In this example, if the utility's revenues decline, its expenses increase, or some other important operating parameter changes, thereby reducing its operating income, the utility should still have sufficient funds available to meet its interest payments and avoid a default. This is clearly important to bond holders and lenders, and to equity investors as well.

Q. WHY DO YOU MAINTAIN THAT MR. REIKER'S CLAIM THAT STAFF'S RECOMMENDED RATE OF RETURN FAILS TO RESULT IN A PRE-TAX INTEREST COVERAGE RATIO OF 3.2?

A. This can easily be demonstrated by referring to Schedule JMR-2, attached to Mr. Reiker's Direct Testimony. Schedule JMR-2, entitled "Cost of Long-term Debt," shows Staff's total long-term debt used in its capital structure. As I testified above, this schedule is not accurate in certain respects. However, it can be used to demonstrate why Mr. Reiker's assertion that his recommended rate of return produces a pre-tax interest coverage ratio of 3.2 is obviously wrong.

The final column in Schedule JMR-2 shows a total annual cost of debt equal to $8,361,302. Using Mr. Reiker's computed annual cost of debt (which he has used in developing his weighted cost of capital and recommended rate of

return), Arizona-American's total operating income and income taxes would have to equal approximately $26,750,000 to obtain an interest coverage ratio of 3.2.

Q. HOW DOES THAT AMOUNT, $26,750,000, COMPARE TO THE TOTAL OPERATING INCOME AND TOTAL INCOME TAX EXPENSE THAT RESULT FROM STAFF'S RECOMMENDATIONS IN THIS CASE?

A. There are 10 water and wastewater districts involved in this rate case. Referring to Staff Schedules All-1 for each of those districts, Arizona-American's total operating income is $6,035,145, and the Company's total income taxes, based on the same Staff schedules, is $2,167,944. Thus, based on Staff's recommendations, the total operating income and income taxes for all 10 districts is $8,203,089. This compares to Mr. Reiker's annual interest expense calculation of $8,361,302, shown on Schedule JMR-2.

Q. WHY DID YOU TESTIFY THAT THE PRE-TAX INTEREST COVERAGE RATIO BASED ON STAFF'S RECOMMENDED RATE OF RETURN WOULD BE GREATER THAN 1.0?

A. Arizona-American has two additional districts that are not involved in this rate case, the Paradise Valley water district and the Mohave wastewater district. To evaluate Arizona-American's pre-tax interest coverage ratio, the operating incomes and income taxes for those districts also have to be included in the calculation. Both of those districts are small, and their inclusion in the calculation will not result in a significant increase in total Company operating income and income taxes. Attached to my testimony as Rebuttal Schedule 4 is a calculation showing the pre-tax interest coverage resulting from Staff's recommendations with the Paradise Valley water and the Mohave wastewater districts included. Using Staff's recommended rate of return and other recommendations in this case, and including operating income and income taxes for the Paradise Valley water and the

Mohave wastewater districts, the pre-tax interest coverage produced by Staff's recommendations is 1.16.

Q. WHAT ELSE DOES YOUR REBUTTAL EXHIBIT 4 CONTAIN, MR. STEPHENSON?

A. Page 1 of my Rebuttal Exhibit 4 contains the pre-tax interest coverage ratio resulting from Staff's recommendations, discussed above. Page 2 of this exhibit shows the return on equity that would actually result from Staff's recommendations in this case. That return is a negative 0.62% based on Mr. Reiker's capital structure. This is why the pre-tax interest coverage ratio based on Staff's recommendations is approximately 1.0.

Pages 3 and 4 of my Rebuttal Schedule 4 contain the same calculations based on the Company's recommendations in this case. As shown on page 3 of the exhibit, the Company's recommendation, if adopted, would result in a pre-tax interest coverage ratio of 1.72. This is certainly better than the ratio resulting from Staff's recommendations, but still well below Staff's 3.4 ratio for the benchmark, A-rated water utilities. The final page of this exhibit, page 4, shows that if the Company's recommendations were adopted, it would earn a return on equity of 2.21%. Once again, this return is better than earning no return, as would be the case under Staff's recommendations, but is still well below the returns currently being earned by publicly traded water utilities, as discussed in Dr. Zepp's rebuttal testimony.

Q. WHAT DO THE PRE-TAX INTEREST COVERAGE RATIOS AND PROJECTED RETURNS ON EQUITY TELL YOU ABOUT STAFF'S RECOMMENDA-TIONS IN THIS CASE?

A. As I stated, Staff's cost of capital witness, who is responsible for Staff's recommended rate of return of 6.6% in this case, has specifically raised the issue

of whether Staff's recommendations will allow Arizona-American to maintain its financial integrity. It is apparent Staff's recommendations will not result in a pre-tax interest coverage ratio anywhere close to the interest coverage ratio S&P requires for an A-rated utility, which is the benchmark cited in Mr. Reiker's testimony. In reality, Staff's recommendations essentially place Arizona-American in a break-even position, i.e., the Company will have sufficient cash flow to meet debt service requirements, but not earn a return on equity. Assuming that Staff is legitimately concerned about this issue, and actually proposes that the Commission take into account the overall financial impact of Staff's recommendations on Arizona-American in setting rates, which the Commission certainly can and should do, then the Company's recommendations should be approved.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes it does.

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STEPHENSON REBUTTAL

EXHIBIT 1

ARIZONA CORPORATION COMMISSION STAFF
RESPONSES TO ARIZONA-AMERICAN WATER COMPANY'S
SECOND SET OF DATA REQUESTS
(Docket No. WS-01303A-02-0867 et al.)

September 19, 2003

2.15 Please define the terms "stale test year" as such terms are used in the Direct Testimony of Darron W. Carlson at page 14, l. 10. In responding to this data request, please identify any Commission rule or prior decision, as well as any relevant industry standards or publications that define when a test year is "stale."

Response: Stale means having lost freshness. Staff believes that the Test Year the Company used would not appear to be the most recent practical Test Year.

Response by: Darron W. Carlson

TOWN OF YOUNGTOWN'S RESPONSES TO ARIZONA-AMERICAN WATER COMPANY'S FIRST SET OF DATA REQUESTS (Docket No. WS-01303A-02-0867, et al.)

1.1 **With respect to Youngtown witnesses Michael E. Burton and Andrew J. Burnham, please:**

(a) identify any proceedings before the Arizona Corporation Commission in which testimony was provided and provide a copy of all such testimony;

(b) identify any manuals, papers, articles or presentations made concerning Arizona law and/or ratemaking proceedings for public service corporations regulated by the Commission;

(c) identify any and all circumstances, including the identity of clients, in which analysis of any ratemaking for any Arizona public service corporation was conducted;

(d) identify all proceedings in any other state in which the witness participated in which the state set rates for a water or wastewater utility based on a determination of the utility's fair value rate base.

RESPONSE:

(a) There are no proceedings, aside from the current proceeding before the Arizona Corporation Commission in which testimony was provided by either Mr. Burton or Mr. Burnham.

(b) There are no manuals, papers, articles, or presentations concerning Arizona law and/or ratemaking proceedings for public service corporations regulated by the Arizona Corporation Commission made by either Mr. Burton or Mr. Burnham.

(c) There are no circumstances in which either Mr. Burton or Mr. Burnham conducted analyses of any ratemaking for any Arizona public service corporations on behalf of a client prior to the Arizona-American rate case proceeding.

(d) There are no proceedings in other states in which either Mr. Burton or Mr. Burnham participated where the state set rates for a water or wastewater utility based upon a determination of the utility's fair value rate base.

ARIZONA CORPORATION COMMISSION STAFF
RESPONSES TO ARIZONA-AMERICAN WATER COMPANY'S
SECOND SET OF DATA REQUESTS
(Docket No. WS-01303A-02-0867 et al.)

September 19, 2003

2.32 Please identify any Commission decision, or industry standard or publication that requires that pro forma adjustments provide a commensurate benefit to ratepayers.

Response: Staff is not aware of any Commission decision, or industry standard or publication that requires that pro forma adjustments provide a commensurate benefit to ratepayers. Sound rate making principles provide that cost of service include prudent costs reasonably necessary for the provision of service under efficient management.

Response by: Alexander Ibhade Igwe

2.33 Please explain how each and every adjustment made by Staff in connection with Arizona-American request for rate increases provides a commensurate benefit to ratepayers.

Response: Staff's adjustments provide a basis for fair and reasonable rates based on prudent costs reasonably necessary for provision of service under efficient management.

Response by: Alexander Ibhade Igwe

STEPHENSON REBUTTAL

EXHIBIT 2

Acquisition Adjustment Analysis

CITIZENS

	BOY	Amortization	EOY	Tax Dep	Def Tax	Accumulated Deferred Tax	AVERAGE
BOY Balance	71,151,139						
1	71151139	$80,700	71070439	2371705	923275	923275	70650000
2	71070439	$161,400	70909039	4743409	1846550	2769825	69140000
3	70909039	$177,500	70731539	4743409	1840061	4609886	67130000
4	70731539	$195,300	70536239	4743409	1832888	6442774	65110000
5	70536239	$214,800	70321439	4743409	1825029	8267803	63070000
6	70321439	$236,200	70085239	4743409	1816405	10084208	61030000
7	70085239	$259,800	69825439	4743409	1806894	11891102	58970000
8	69825439	$285,700	69539739	4743409	1796457	13687559	56890000
9	69539739	$314,300	69225439	4743409	1784931	15472490	54800000
10	69225439	$345,600	68879839	4743409	1772317	17244807	52690000
11	68879839	$380,100	68499739	4743409	1758414	19003221	50570000

STEPHENSON
Rebuttal Exhibit 2

STEPHENSON REBUTTAL

EXHIBIT 3

ARIZONA-AMERICAN WATER COMPANY
PROPOSED RATE OF RETURN ON LONG-TERM DEBT
($1,000's)

2003		Principal	Net Proceeds	Annual Charges: Interest	Annual Charges: Debt Expense	Annual Charges: Total	Effective Cost of Debt
7.12%	Due 8/08	$4,500.0	$4,459.0	$320.4	$4.1	$324.5	7.28%
4.92%	Due 11/06	$3,500.0	$3,500.0	$172.2	$0.0	$172.2	4.92%
4.92%	Due 11/06	$154,948.0	$154,861.0	$7,623.4	$8.7	$7,632.1	4.93%
1.28%	Due 9/28	$10,635.0	$10,604.0	$136.1	$3.1	$139.2	1.31%
6.26%	Due 9/12	$76.0	$76.0	$4.8	$0.0	$4.8	6.32%
5.76%	Due 8/13	$39.0	$39.0	$2.2	$0.0	$2.2	5.64%
7.18%	Due 8/15	$64.0	$64.0	$4.6	$0.0	$4.6	7.19%
7.18%	Due 8/15	$55.0	$55.0	$3.9	$0.0	$3.9	7.09%
6.00%	Due 11/13	$12,517.0	$12,454.0	$751.0	$6.3	$757.3	6.08%
	TOTAL	186,334.0	186,112.0	9,018.6	22.2	$9,040.8	4.86%

STEPHENSON
Rebuttal Exhibit 3

ARIZONA-AMERICAN WATER COMPANY
PROPOSED RATE OF RETURN
($1,000's)

	Amount	Ratio	Cost	Weighted Avg. Cost
2004				
Debt	$186,334.0	60.00%	4.86%	2.91%
Equity	$124,266.0	40.00%	11.50%	4.60%
Total	$310,600.0	100.00%		7.51%

STEPHENSON REBUTTAL

EXHIBIT 4

Arizona American
Pre-Tax Interest Coverage under Staff Recommendations
Test Year Ended December 31, 2001

Stephenson Rebuttal Exhibit 4
Page 1

Line No.		Column 1 (a) ACC Staff's Proposed Operating Income	Column 2 (a) Income Taxes	Column 3 (Col. 1 + Col. 2) Total Available for Interest Coverage
1	Agua Fria	$ 1,101,634	$ 395,729	$ 1,497,363
2	Anthem Water	611,179	219,548	830,727
3	Anthem / Agua Fria Wastewater	180,748	64,929	245,676
4	Havasu Water	54,096	19,432	73,528
5	Mohave Water	634,934	228,081	863,015
6	Sun City Water	1,410,332	506,619	1,916,951
7	Sun City Wastewater	581,576	208,914	790,490
8	Sun City West Water	793,779	285,141	1,078,921
9	Sun City West Wastewater	592,474	212,828	805,302
10	Tubac	74,393	26,724	101,116
11	Subtotal (Total Lines 1 to 10)	$ 6,035,145	$ 2,167,944	$ 8,203,089
12				
13				
14				
15				
16		Operating Income	Income Taxes	
17				ACC Staff's Proposed Interest Coverage From Schedule JRM-9
18	Paradise Valley Water **(b)**	$ 1,395,483	$ (65,560)	1,329,923
19	Mohave Wastewater **(b)**	138,008	0	138,008
20	Total Operating Income and			
21	Income Taxes (Line 11 + 18 + 19)	$ 7,568,636	$ 2,102,384	$ 9,671,020
22				
23	ACC Staff Interest Expense from JRM-2			8,361,302
24				
25	ACC Staff Actual Interest Coverage (Line 21 divided by Line 23)			**1.1566** **3.2**
26				
27				
28	**(a)** Source of Data: ACC Staff's Direct / Schedule AII-1 for each district.			
29	**(b)** Source of Data: Arizona Corporation Commission Annual Report for 12/31/2001			
30				

Arizona American
Equity Return under Staff Recommendations
Test Year Ended December 31, 2001

Stephenso n Rebuttal
Exhibit 4
Page 2

Line No.		(a) ACC Staff's Proposed Operating Income
1	Agua Fria	$ 1,101,634
2	Anthem Water	611,179
3	Anthem / Agua Fria Wastewater	180,748
4	Havasu Water	54,096
5	Mohave Water	634,934
6	Sun City Water	1,410,332
7	Sun City Wastewater	581,576
8	Sun City West Water	793,779
9	Sun City West Wastewater	592,474
10	Tubac	74,393
11	Subtotal (Sum of Lines 1 through 10)	6,035,145
12		
13		
14		Operating
15		Income
16	Paradise Valley Water **(b)**	$ 1,395,483
17	Mohave Wastewater **(b)**	138,008
18	Total Operating Income (Sum of Lines 11 + 16 + 17)	$ 7,643,029
19		
20	Less:	
21	ACC Staff's Interest Expense From JRM-2	8,361,302
22		
23	Income Available for Common Equity	$ (718,273)
24	(Line 18 minus Line 21)	
25	Divided by Common Equity (Equity Computed below)	$ 115,309,693
26		
27	ACC Staff Equity Return (Line 23 divided by Line 25)	**-0.62%**

ACC Staff's Proposed Equity Return From Schedule JRM-9: **9.70%**

	Column 1	**Column 2** Dollar Amount	**Column 3** Percent of Total	
29				
30				
31				
32	Debt	181,956,852	61.21%	**(1)**
33	Equity	115,309,693	38.79%	**(3)**
34	Total Capitalization	297,266,545	100.00%	**(2)**

35

36 **(1)** Debt Dollar Amount from JRM-2. Debt Percentage from JRM-9.

37

38 **(2)** $181,956,852 divided by 61.21% = $297,266,545 Equals Total Capitalization
39 (Line 32, Column 2 divided by Line 32, column 3)

40

41 **(3)** $297,266,545 minus $181,956,852 = $115,309,693
42 (Line 34, Column 2 Minus Line 32, Column 2). Or $297,266,545 multiplied by 38.79%

43

44 **(a)** Source of Data: ACC Staff's Direct / Schedule All-1 for each district.
45 **(b)** Source of Data: Arizona Corporation Commission Annual Report for 12/31/2001

46

Arizona American
Pre-Tax Interest Coverage under Company Recommendations
Test Year Ended December 31, 2001

Stephenson Rebuttal Exhibit 4
Page 3

Line No.		Column 1 (a) Company's Proposed Operating Income	Column 2 (a) Income Taxes	Column 3 (Col. 1 + Col. 2) Total Available for Interest Coverage
1	Agua Fria	$ 1,377,911	$ 529,885	$ 1,907,796
2	Anthem Water	723,305	278,204	1,001,509
3	Anthem / Agua Fria Wastewater	209,480	80,549	290,029
4	Havasu Water	91,089	34,953	126,042
5	Mohave Water	1,008,720	388,068	1,396,788
6	Sun City Water	3,327,708	1,139,720	4,467,428
7	Sun City Wastewater	1,292,150	497,132	1,789,282
8	Sun City West Water	1,159,164	445,790	1,604,954
9	Sun City West Wastewater	917,584	352,801	1,270,385
10	Tubac	130,028	49,984	180,013
11	Subtotal (Total Lines 1 to 10)	$ 10,237,140	$ 3,797,087	$ 14,034,227
12				
13				
14				
15				
16		Operating	Income	
17		Income	Taxes	
18	Paradise Valley Water **(b)**	$ 1,395,483	$ (65,560)	1,329,923
19	Mohave Wastewater **(b)**	138,008	0	138,008
20	Total Operating Income and Income			
21	Taxes (Lines 11 + 18 + 19)	$ 11,770,631	$ 3,731,527	$ 15,502,158
22				
23	Company's Interest Expense **(c)**			9,018,600
24				
25	Company's Proposed Interest Coverage			**1.7189**
26	(Line 21 divided by Line 23)			
27				
28	**(a)** Source of Data: Company's Rebuttal Schedules C-1 for each district.			
29	**(b)** Source of Data: Arizona Corporation Commission Annual Report for 12/31/2001			
30	**(c)** Source of Data: Stephenson Rebuttal Exhibit 3			

Arizona American
Equity Return under Company Recommendations
Test Year Ended December 31, 2001

Stephenson Rebuttal Exhibit 4
Page 4

Line No.		(a) Company's Proposed Operating Income
1	Agua Fria	$ 1,377,911
2	Anthem Water	723,305
3	Anthem / Agua Fria Wastewater	209,480
4	Havasu Water	91,089
5	Mohave Water	1,008,720
6	Sun City Water	3,327,708
7	Sun City Wastewater	1,292,150
8	Sun City West Water	1,159,164
9	Sun City West Wastewater	917,584
10	Tubac	130,028
11	Subtotal (Sum of Lines 1 through 10)	10,237,140
12		
13		
14		
15		Operating Income
16		
17	Paradise Valley Water **(b)**	$ 1,395,483
18	Mohave Wastewater **(b)**	138,008
19	Total Operating Income (Lines 11 + 17 + 18)	$ 11,770,631
20		
21	Less:	
22	Company's Interest **(c)**	9,018,600
23		
24	Income Available for Common Equity	$ 2,752,031
25	(Line 19 minus Line 22)	
26	Common Equity **(c)**	$ 124,266,000
27		
28	Company's Equity Return	**2.21%**
29	(Line 24 divided by Line 26)	
30		
31		
32		
33		
34	**(a)** Source of Data: Company's Rebuttal Schedules C-1 for each district.	
35	**(b)** Source of Data: Arizona Corporation Commission Annual Report for 12/31/2001	
36	**(c)** Source of Data: Stephenson Rebuttal Exhibit 3	

BOURASSA

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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WEST WATER AND WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0867**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0868**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	**DOCKET NO. W-01303A-02-0869**

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0870**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.	**DOCKET NO. W-01303A-02-0908**

REBUTTAL TESTIMONY OF

THOMAS BOURASSA

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND ADDRESS?

A. Thomas Bourassa, 139 W. Wood Drive, Phoenix, Arizona 85029.

Q. ARE YOU THE SAME THOMAS BOURASSA WHO FILED DIRECT TESTIMONY IN THIS MATTER?

A. Yes.

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. I will provide rebuttal testimony on the general topics of rate base, revenues and expenses in response to the recommendations by Staff and RUCO concerning Arizona-American's rate filing. As applicable, I will use the same abbreviations and conventions as in my direct testimony. I also am testifying in support of Rebuttal Schedules A-1, B-1, B-2, B-3, B-4, B-5, C-1 and C-2.

Q. HOW WILL YOUR TESTIMONY BE ORGANIZED?

A. I will provide a summary of the issues in the instant case, then describe Arizona-American's rebuttal positions, and, finally, I will offer rebuttal to the other parties in the case. If I do not respond to a specific proposal or adjustment proposed by Staff or RUCO, it does not mean that Arizona-American accepts the particular proposal or adjustment. Arizona-American's various Rebuttal Schedules set forth its position with regard to adjustments or proposals by other parties.

II. SUMMARY

Q. WHAT IS THE REVENUE INCREASE THAT ARIZONA-AMERICAN IS PROPOSING IN ITS REBUTTAL PRESENTATION AND HOW DOES IT COMPARE TO ARIZONA-AMERICAN'S RATE INCREASE PROPOSAL IN ITS DIRECT FILING?

A. Bourassa Rebuttal Exhibit 1, attached hereto, summarizes Arizona-American's

requested direct and rebuttal revenue increases by district.

Q. AM I CORRECT IN ASSUMING THAT ARIZONA-AMERICAN'S REBUTTAL INCREASE IS LOWER THAN ARIZONA-AMERICAN'S DIRECT FILING DUE TO ADOPTING ADJUSTMENTS PROPOSED BY OTHER PARTIES TO THE CASE?

A. Yes, to some extent that is true. Arizona-American has accepted a number of Staff's and RUCO's adjustments to revenues and expenses, which adjustments impact Arizona-American's operating income, and to plant-in-service, which impact Arizona-American's proposed fair value rate base ("FVRB"). In addition, Arizona-American proposes some of its own adjustments to revenues, expenses, and FVRB in response to positions taken by the other parties.

The revenue requirement is also lower because Arizona-American made revisions to the proposed rate of return on FVRB. The rate of return is discussed in Mr. Stephenson's rebuttal testimony. Arizona-American now proposes a 7.52% return on FVRB.

Q. CAN YOU SUMMARIZE THE POSITIONS OF THE PARTIES WITH RESPECT TO REVENUES AND EXPENSES?

A. Yes. Bourassa Rebuttal Exhibit 2, attached hereto, provides a synopsis of the revenue and expense adjustments proposed by Arizona-American in its direct filing and the positions of Staff and RUCO with respect to these adjustments. Arizona-American rebuttal position is also shown. Various aspects of these positions will be discussed in detail later in this testimony.

Q. HOW DOES ARIZONA-AMERICAN'S REBUTTAL REVENUE INCREASE COMPARE TO STAFF AND RUCO?

A. Bourassa Rebuttal Exhibit 1 also summarizes the revenue increases recommended by Arizona-American, Staff, and RUCO.

Q. WHAT IS THE FAIR VALUE RATE BASE ARIZONA-AMERICAN IS PROPOSING IN THIS REBUTTAL TESTIMONY AND HOW DOES IT COMPARE TO ARIZONA-AMERICAN'S DIRECT FILING?

A. Bourassa Rebuttal Exhibit 3, attached hereto, summarizes Arizona-American's direct and rebuttal FVRB by district.

Q. WHY IS ARIZONA-AMERICAN'S REBUTTAL FAIR VALUE RATE BASE LOWER THAN ITS DIRECT FILING FAIR VALUE RATE BASE?

A. Arizona-American has agreed to a number of Staff adjustments to plant-in-service. In addition, Arizona-American has proposed its own adjustments in response to the Staff and RUCO testimony. Some of Arizona-American's adjustments to its FVRB are based on Staff's criticisms of the cost indexes used in Arizona-American's RCND study offered in the direct filing. These will be discussed later in this testimony. Arizona-American continues to propose that the RCND rate base be used as the FVRB, instead of the position advocated by Staff, RUCO and the Town of Youngtown that the original cost rate base ("OCRB") be used as the exclusive measure of Arizona-American's FVRB.

Q. HOW DOES ARIZONA-AMERICAN'S REBUTTAL FAIR VALUE RATE BASE COMPARE TO STAFF AND RUCO?

A. Bourassa Rebuttal Exhibit 3 also summarizes the differences between the proposed FVRB proposed by Arizona-American, Staff, and RUCO. Both Staff and RUCO propose that OCRB, excluding any acquisition adjustment, be used as the sole determinant of the FVRB for each district. Both Staff and RUCO cite different reasons for proposing the exclusive use of original cost as Arizona-American's FVRB. Again, Arizona-American proposes that RCND be used as its FVRB because RCND provides a much better estimate of the current value of Arizona-American's utility plant and property used to furnish service in each

district. This issue will be discussed later in my testimony.

Q. CAN YOU SUMMARIZE THE POSITIONS OF THE PARTIES WITH RESPECT TO THE FAIR VALUE RATE BASE?

A. Yes. Bourassa Rebuttal Exhibit 4, attached hereto, provides a synopsis of the FVRB and adjustments proposed by Arizona-American in its direct filing and the positions of Staff and RUCO with respect to these adjustments. Arizona-American's rebuttal position is also shown. All of these issues will be discussed in detail later in my testimony.

III. RATE BASE

Q. WOULD YOU PLEASE DISCUSS ARIZONA-AMERICAN'S PROPOSED ORIGINAL COST RATE BASE, AND WHAT ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF AND/OR RUCO?

A. Arizona-American's rebuttal OCRB and adjustments are shown on Rebuttal Schedule B-2 for each district. Arizona-American has accepted Staff's plant-in-service adjustments for plant not used and useful and for unidentified plant. These adjustments are shown in Rebuttal Schedule B-2, pages 2a and 3a, adjustments 1 and 2, for each district. However, Arizona-American does not agree with Staff's recommended accumulated depreciation adjustment related to these adjustments to plant-in-service.

Q. WHY ARE THE AMOUNTS OF YOUR ADJUSTMENTS ON REBUTTAL SCHEDULE B-2, PAGE 2a and 3a, DIFFERENT THAN STAFF'S ADJUSTMENTS 1 AND 2 ON STAFF SCHEDULES DWC4?

A. Staff did not properly adjust the common allocated plant for each district on schedules DWC-4. Arizona-American has corrected these errors.

Q. CAN YOU EXPLAIN WHY STAFF DID NOT CORRECTLY ADJUST THE COMMON ALLOCATED PLANT?

A. Yes. In Arizona-American's direct filing, general plant recorded by district was pooled to common plant and allocated to each district based on year-end customer counts. Thus, adjustments to general plant made to a specific district must be treated in the same fashion to be consistent with the direct filing. The corrected allocated common plant adjustments are shown on Rebuttal Schedule B-2, pages 6a and 7a, for each district.

Q. YOU MENTIONED ABOVE THAT ARIZONA-AMERICAN DOES NOT AGREE WITH THE STAFF ADJUSTMENT TO ACCUMULATED DEPRECIATION FOR ADJUSTMENT 1. CAN YOU PLEASE EXPLAIN THE BASIS FOR THIS DISAGREEMENT?

A. Yes, Arizona-American's proposed adjustments distinguish between plant that should be retired and abandonments. Staff has two types of adjustments, one for plant "not used and useful" and one for "unidentified" plant. For each type of plant, Staff only removed the accumulated depreciation on the books as of December 31, 2001. Arizona-American disagrees with this treatment.

The plant not used and useful is plant that should be retired. For retired plant, accumulated depreciation equivalent to the full original cost of the plant should be removed. Staff did not do this.

Unidentified plant that was given rate base treatment in prior rate cases and is now being removed from rate base should also be considered retired. Again, accumulated depreciation in an amount equivalent to the full original cost of the plant should be removed. Staff did not do this.

Unidentified plant that was never afforded prior rate base treatment should be considered an abandonment. For this type of plant, accumulated depreciation through December 31, 2001 should be removed. Staff did do this correctly.

Q. PLEASE CONTINUE DESCRIBING THE RATE BASE ADJUSTMENTS.

A. Arizona-American agrees with Staff's proposed adjustment to plant-in-service identified as adjustments 3 and 4 and shown on schedules DWC-4 for misposted plant and previous Commission decisions that were not recorded by Arizona-American. These adjustments to plant-in-service are shown on Rebuttal Schedule B-2, pages 2a and 3a.

Arizona-American also accepts Staff's adjustments to post test year plant that reflect actual 2002 costs, shown in Rebuttal Schedule B-2, page 2a, adjustment 5, for each district. In its direct filing, Arizona-American used estimates of the plant to be completed because the rate case was filed before year-end. This adjustment is appropriate because the actual costs are now known.

Q. WHEN WERE THE 2002 PROFORMA PLANT AMOUNTS KNOWN AND MEASURABLE?

A. Since Arizona-American's filing was accepted by Staff in January 2003.

Q. DID STAFF REVIEW, AUDIT, OR OTHERWISE VERIFY THE AMOUNTS?

A. Yes, Staff did verify the amounts, as generally discussed in the direct testimonies of Staff witnesses Carlson, Hammon, Chelus, Hains, and Scott.

Q. PLEASE CONTINUE WITH YOUR DISCUSSION.

A. Arizona-American will accept Staff's adjustment to eliminate the AFUDC adjustment proposed in Arizona-American's direct filing. Rebuttal Schedule B-2, page 2a, adjustment 6 reflects this adjustment. The reversal of the direct filing AFUDC adjustment is supported by evidence, discovered during the Staff audit, that this adjustment had already been recorded by Citizens to plant-in-service.

Q. DID YOU ACCEPT RUCO'S PROPOSED ADJUSTMENT TO

ACCUMULATED DEPRECIATION?

A. No, RUCO's recomputed accumulated depreciation is overstated for two primary reasons. First, RUCO employed a half-year convention where as Arizona-American employs a half-month convention. Second, RUCO ignored the effects of the historical plant adjustment accumulated depreciation component when historical plant adjustments (not retirements) were made.

Q. DID STAFF ACCEPT ARIZONA-AMERICAN'S ACCUMULATED DEPRECIATION BALANCES, EXCLUSIVE OF STAFF'S PROPOSED ADJUSTMENTS TO ACCUMULATED DEPRECIATION FOR PLANT NOT USED AND USEFUL AND UNIDENTIFIED PLANT?

A. Yes.

Q. WHAT IS THE PRIMARY REMAINING DIFFERENCE BETWEEN ARIZONA-AMERICAN'S PROPOSED ORIGINAL COST RATE BASE AND STAFF?

A. The acquisition adjustment.

Q. IS ARIZONA-AMERICAN ASKING FOR A RETURN ON THE ACQUISITION ADJUSTMENT?

A. Arizona-American is not asking for a return on the acquisition adjustment. Arizona-American is proposing that an RCND rate base be used as FVRB, not OCRB. Arizona-American's FVRB does not include the acquisition adjustment.

Q. IS ARIZONA-AMERICAN REQUESTING A RETURN OF THE ACQUISITION ADJUSTMENT?

A. In the direct filing, Arizona-American included amortization of the acquisition adjustment in depreciation expense. The amortization component was not a significant amount because a 40-year mortgage-style amortization was used, and in any event, the amortization component from depreciation expense has been

removed in the rebuttal filing. This adjustment is discussed by Mr. Stephenson in his rebuttal testimony.

Q. WOULD YOU PLEASE DISCUSS YOUR PROPOSED RCND RATE BASE, AND WHAT ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF AND/OR RUCO?

A. Arizona-American's rebuttal trended RCND rate base and adjustments are shown on Rebuttal Schedules B-3, page 2 and 3.

Arizona-American accepted Staff's original cost adjustments (with corrections as noted previously). The adjustments made to the RCND rate base were made based on the trended values.

Arizona-American also made adjustments to RCND rate base due to changes to its RCND plant base. The changes are a result of revisions to the cost indexes used in trending original costs and are based on Staff's recommended cost indexes. Rebuttal Schedule B-3, adjustment 9, and Rebuttal Schedule B-3, pages 6a, 6b, 7a, and 7b, adjustments 4-11 for Maricopa common plant, and adjustments 2 and 3 for Mohave common plant, reflect the adjustments to the RCND plant base for each district.

Q. DID STAFF OR RUCO RECOMMEND ADJUSTMENTS TO ARIZONA-AMERICAN'S RCND RATE BASE?

A. No, Staff and RUCO have elected not accept Arizona-American's RCND rate base and, as a result, did not propose any adjustments to the RCND rate bases for the 10 separate water and wastewater districts.

Q. WHY DID RUCO CHOOSE TO REJECT ARIZONA-AMERICAN'S RCND RATE BASE?

A. RUCO simply claims that using RCND as Arizona-American's "fair value" rate base ("FVRB") unjustifiably inflates the rate base. In effect, RUCO argues that a

utility's "fair value" rate base must always equal its OCLD rate base. Testimony of Marylee Diaz Cortez ("Diaz Cortez DT") at 13.

Q. IS THIS A VALID CRITICISM?

A. It is my understanding that Arizona law requires the Commission to make a finding of the "fair value" of Arizona-American's property, i.e., its FVRB, and to use that finding as the basis for setting rates. In *Simms*, for example, the Arizona Supreme Court recognized that fair value "allows the increase or decrease in cost of construction to influence the rates, whereas [OCRB] makes no such allowance." *Simms*, 80 Ariz. 145, 151, 294 P.2d 378, 382 (1956). The goal of finding and using the "fair value" of the utility's property is to ensure that the rates are set on the basis of the current value of the utility's plant and property, or, as the Arizona Supreme Court said in *Simms*, "the value of the properties at the time of inquiry." *Simms*, 80 Ariz. at 151, 294 P.2d at 382. Therefore, it is appropriate to use the RCND rate base as the FVRB, because it reflects the current value of the plant, as opposed to its historic or book cost.

In this particular case, Arizona-American's proposed FVRB is supported by the purchase price recently paid by Arizona-American for the water and wastewater systems and related assets owned by Citizens Communications in Arizona. The fact that these systems were recently the subject of an arms-length purchase/sale, involving independent and sophisticated parties, gives further support to Arizona-American's use of RCND rate base as its FVRB.

Q. ARE YOU SUGGESTING THAT THE COMMISSION USE THE PURCHASE PRICE PAID BY ARIZONA-AMERICAN AS THE FAIR VALUE RATE BASE?

A. No, I am not. However, the fact that two independent and sophisticated utility firms were able to reach an agreement on a purchase price that was substantially

greater than the original or book cost of the utility plant and assets is evidence that the use of an OCRB to set rates in this proceeding would violate the "fair value" standard embodied in the Arizona Constitution.

Q. WHY DID STAFF CHOOSE TO REJECT ARIZONA-AMERICAN'S RCND RATE BASE?

A. Staff claims Arizona-American's RCN study is "irreparably flawed" and chose not to propose any adjustments to Arizona-American's RCND rate base. E.g., Direct Testimony of Marlin Scott, Jr. ("Scott DT") at 7, l. 21.

Q. HAVE YOU REVIEWED THE RCND RATE BASES AND RCN STUDIES USED IN THE PRIOR ARIZONA-AMERICAN RATE CASES?

A. Yes. I have reviewed RCN studies submitted in the most recent Citizens Communications water and wastewater rate proceeding, which involved the Sun City, Sun City West, Agua Fria and Tubac districts purchased by Arizona-American. Rates were approved in that proceeding in Decision No. 60172 (May 7, 1997). In addition, I reviewed the RCN study submitted in Paradise Valley Water Company's 1996 rate proceeding. Rates were approved in that proceeding in Decision No. 60220 (May 29, 1997). Paradise Valley Water Company's name was changed several years later to Arizona-American Water Company.

Q. WERE THE RCND RATE BASES AND RCN STUDIES ACCEPTED IN THOSE CASES?

A. Yes, they were.

Q. HOW WERE THE RCN STUDIES PREPARED IN THESE CASES?

A. The plant-in-service base (asset listing) was summarized by asset class and vintage year. That is, for each asset class and vintage year the total original cost was obtained. A cost trend factor, based on a generally accepted cost index, was then applied to each asset class and vintage year to derive the trended value.

Q. WHAT WAS THE SOURCE OF THE COST INDEXES?

A. Handy-Whitman Bulletin 155, Plateau Region, for plant and the Consumer Price Index ("CPI") for certain non-construction plant items such as computers and transportation equipment.

Q. HOW WAS ACCUMULATED DEPRECIATION TRENDED?

A. Accumulated depreciation was trended by asset class by multiplying original cost accumulated depreciation by the ratio of the trended plant in service value to original cost plant in service value.

Q. HAVE YOU PROVIDED COPIES OF THE PRIOR CASE RCN STUDIES?

A. Yes. These studies are attached hereto as Bourassa Rebuttal Exhibit 5 and Bourassa Rebuttal Exhibit 6, respectively, for the prior Citizens and Paradise Valley rate cases.

Q. HOW WERE THE RCND RATE BASES PREPARED IN THOSE CASES?

A. The RCND rate base was prepared by starting with the trended plant in service base, and then deducting (1) trended accumulated depreciation, (2) trended advances-in-aid of construction and (3) trended contributions-in-aid of construction.

Q. HOW WERE ADVANCES AND CONTRIBUTIONS TRENDED?

A. By multiplying the actual amounts of the advances and contributions by the ratio of the trended plant in service value to original cost plant in service value.

Q. WAS CONTRIBUTED PLANT REMOVED FROM THE PLANT-IN-SERVICE BASE BEFORE TRENDING?

A. No. Contributions-in-aid of construction were deducted from rate base in the RCND rate base calculation, not from the RCN plant-in-service base.

Q. DID YOU PREPARE THE RCN STUDY IN THE DIRECT FILING

CONSISTENT WITH THE STUDIES USED IN THE PRIOR CITIZENS AND PARADISE VALLEY WATER RATE CASES?

A. Yes, I did.

Q. ARE THERE DIFFERENCES BETWEEN THE RCN STUDIES IN THE PRIOR RATE CASES AND YOUR STUDY?

A. Yes, there are some minor differences. The plant-in-service base (asset listing) served as the data source of my study. I did not summarize the plant-in-service base by asset class and vintage year. Instead, I used the asset listing directly and applied a cost trend factor, based on a cost index, using the vintage month and year of each asset item to derive the trended value. I did not consider the account or asset class, only the original cost and vintage year, so there was no need to summarize the data by asset class and vintage year.

Q. WHAT WAS THE SOURCE OF YOUR COST INDEXES?

A. Handy Whitman Public Utilities, Semiannual Indexes Used in Deriving Estimates of the Value of Construction Put in Place in Constant Dollars (1996=100). I employed a national Handy-Whitman public utility index for trending plant rather than an account-specific, regional Handy-Whitman index as in Bulletin 155.

Q. WHY DID YOU USE THE MORE GENERAL INDEXES PUBLISHED BY HANDY WHITMAN?

A. Handy-Whitman Bulletin 155 does not specify an index for all water plant accounts and none for the wastewater accounts. The more general index eliminates the need to use proxies for accounts not listed in Handy Whitman Bulletin 155.

Q. WHAT DO YOU MEAN BY "PROXIES"?

A. By "proxies" I mean an index that must be chosen when an account-specific

index in not available. For example, there is no specific account index for any of the wastewater plant accounts. So, a water account index must be selected that covers plant that is similar in nature to the wastewater plant being trended.

Q. IS THERE WATER PLANT SIMILAR IN NATURE TO WASTEWATER PLANT?

A. Yes, however, in some cases, it is a matter of opinion as to which index is most similar. If cost indexes were prepared for wastewater plant accounts, some differences may exist, depending on the author's judgment.

Q. WHY DIDN'T YOU USE INDEXES FOR WATER PLANT ACCOUNTS LISTED IN HANDY WHITMAN BULLETIN 155 AND USE THE MORE GENERAL INDEX FOR PLANT ACCOUNTS NOT LISTED?

A. My goal was to be consistent and eliminate areas of dispute.

Q. WHAT REASONS DID STAFF OFFER AS THE BASIS FOR ELECTING TO REJECT THE RCND STUDY?

A. The following reasons were given:

1. Retirements and abandonments were not removed before trending the plant base.
2. Contributed plant was not removed from the plant base before trending.
3. Incomplete plant descriptions and quantities for some plant items.
4. The RCN study was no more than an asset listing.
5. Capitalized overhead was applied in a haphazard fashion.
6. Land, franchises, and organizational costs were trended.
7. Inappropriate cost indexes were employed in trending the plant base.

E.g., Scott DT at 5-7.

Q. IS THE FACT THAT RETIREMENTS AND ABANDONMENTS WERE NOT REMOVED FROM THE RCND PLANT BASE A VALID REASON

FOR REJECTING THE STUDY?

A. No. As with the original cost plant base retirements, when Staff identifies plant that should have been retired, the plant base is adjusted. In the case of a trended RCND plant base, the trended value is removed. In the previous Citizen's rate proceeding identified above, this is exactly what Staff did. In the instant case, retirements were identified during Staff's audit of plant and adjustments were made to the original cost plant base. The trended values could just as easily be removed from the trended RCND plant base.

Q. AREN'T RETIREMENTS RATE BASE NEUTRAL?

A. Yes, the total value of retirements is removed from plant-in-service base and from accumulated depreciation. Therefore, the rate base doesn't change.

Q. ARE ASSET DESCRIPTIONS AND QUANTITIES USED IN A TRENDED RCND PLANT BASE DETERMINATION?

A. No. Only the original cost, vintage year and, depending on the index source employed, the plant account or category needed to apply the index. In the previous Citizen's rate proceeding, for example, the trended RCN study plant base schedule included just the total original cost by plant account and vintage year. No specific plant description, make, manufacturer, or quantity was included in the study. Bourassa Rebuttal Exhibit 5, as mentioned previously, is a copy of that RCN study. This RCN study was accepted by Staff. Bourassa Rebuttal Exhibit 7 is a copy of the Staff report from that prior docket.

Q. IS THE FACT THAT CONTRIBUTED PLANT WAS NOT REMOVED FROM THE PLANT BASE BEFORE TRENDING A VALID REASON?

A. No, contributions-in-aid of construction are <u>not</u> typically removed before trending the plant base. Contributions are trended and then deducted from the rate base, not from the plant base. This is true for both original cost rate base <u>and</u>

trended RCND rate base. The reason is that contributions are funds contributed by a third party to the utility. That is, contributions are a financing source. The plant itself (i.e., a main) does not change, regardless of how it is financed. The approach I used in this case is exactly how it was done in the prior rate cases. In any case, the net effect on the RCND rate base is the same: contributions are deducted.

Q. WAS THE RCN STUDY NO MORE THAN AN "ASSET LISTING" AS STAFF CONTENDS?

A. No, it is an asset listing that includes the plant account, original cost, acquisition date, trend factor, and trended value. However, the "asset list" is the basis of a trended RCN study. In the previous rate cases mentioned above, a similar "asset list" would have been the basis for the summary schedules (see Bourassa Rebuttal Exhibits 5 and 6) accepted by Staff. The difference between the last rate proceeding and the instant case is in the amount of detail provided.

Q. WAS CAPITALIZED OVERHEAD APPLIED IN A "HAPHAZARD FASHION"?

A. No. Staff cited one or two isolated examples of allegedly "haphazard application" of overheads. Staff has not shown this to be a pervasive problem. Further, while there may exist some human error in the application of any project management system, the general methodology and protocol employed by Arizona-American is widely accepted. Arizona-American has used widely accepted project management systems over the years both before and since Arizona-American's last rate proceeding.

Q. HOW CAN SEEMINGLY HIGH OVERHEADS RESULT IN CONNECTION WITH SPECIFIC PROJECTS?

A. It depends on the circumstances. When capitalized overhead is spread to open

projects, the amount each project receives depends the total amount of overhead, how many projects are open, and the relative dollar amounts of those projects.

For example, for a given amount of total overhead, if many projects are open during the period, then the overhead gets spread over many projects and the overhead amounts appear very low. If only a few projects are open, then the same overhead gets spread over a few projects and may appear high. In both cases, the overhead amount is the same.

As another example, for a given amount of total overhead, if the total cost of the open projects is high, then the overhead amounts may appear low. If the total cost of the open projects is low, then the overhead amounts, on a percentage basis, may appear very high. Again, however, the total overhead amount is the same.

In both examples, the question is not the reasonableness of the total overhead that applied, nor should there be a question in the amounts each project receives. If overheads are too high, they are also too high with respect to the OCLD rate base. There has been no testimony offered or adjustments proposed by Staff that calls into question the total overheads historically applied to plant. Further, while the project management system employed since the last rate proceeding has changed, the methodology and protocol for applying capitalized overheads to assets has been consistent.

Q. STAFF ALSO CRITICIZES ARIZONA-AMERICAN'S TREATMENT OF LAND, FRANCHISES, AND ORGANIZATIONAL COSTS. DID YOU TREND THESE IN THE RCN STUDY?

A. Yes, I did so because, just like other plant costs, the costs of land, organization, and franchises generally increase in value. As a general rule, it costs more to purchase land today than 20 years ago. Similarly, it costs more today to organize

a business and to obtain the required franchises and approvals necessary to operate. The alternative to trending is to obtain appraisals. In my opinion, the trended values of land, franchises and organizational costs in this case are understated in this case.

Q. DID YOU USE INAPPROPRIATE COST INDEXES IN TRENDING THE PLANT BASE, AS STAFF MAINTAINS?

A. Not in my opinion. As mentioned, I employed national Handy-Whitman public utility indexes for trending plant rather than the account-specific, regional Handy-Whitman indexes preferred by Staff. This is a matter of disagreement over whether one index is "better" than the other. Both sets of indexes are published by the same engineering valuation service and are widely used throughout the country. I did trend computer and office equipment using the same national public utility cost indexes rather than using the CPI indexes. I agree with Staff that the CPI is more appropriate for trending those particular plant items.

In any case, none of the cost indexes I have employed makes the study "irreparably flawed," as Staff claims. Staff could have proposed adjustments to the RCN study based on computations of value using their "preferred" cost indexes, if they chose to do so.

Q. DID STAFF HAVE THE TIME TO DO THIS?

A. Yes, I provided Excel files of the RCN study to Staff. All that needed to be done was to drop in alternative cost indexes to compute alternative trended values to determine proposed adjustments. This would have taken only a few days to complete. I prepared a revised RCN study for all 10 districts involved in the instant case in two days. This is simply not a legitimate basis for rejecting the entire RCN study. By analogy, Staff did not reject Arizona-American's OCLD

rate base because Staff disagreed with some of Arizona-American's adjustments to it. Staff instead proposed its own adjustments to the rate base. Staff could have done the same thing with respect to Arizona-American's RCND rate base. It chose not to do so but that does not make the study irreparably flawed.

Q. WHY DIDN'T STAFF DO ITS OWN RCN STUDY, CORRECTING THE "ERRORS" IT IDENTIFIED?

A. It appears that Staff did prepare its own RCN study for each district. I found RCN studies located in the work papers of Mr. Hammond, Mr. Chelus, Mr. Scott, and Ms. Hains. Copies of those studies are attached as Bourassa Rebuttal Exhibit 8. Each appears to be a modified version of my original Excel files.

Q. CAN YOU SUMMARIZE THE RESULTS FOUND IN STAFF'S WORK PAPERS? HOW DO THEY COMPARE TO THE COMPANY'S RCN VALUES IN THE DIRECT FILING AND REBUTTAL FILING?

A. Bourassa Rebuttal Exhibit 9 shows Staff's results by district. I must point out that Staff's trended RCN values exclude the trended values of plant not used and useful and unidentified as proposed in Staff's adjustment 1 and 2 on DWC-4. I have adjusted the Company's RCN values to reflect these adjustments for an "apples-to-apples" comparison. The studies also contain a few computation errors. I have corrected those errors.

The Company's direct and rebuttal RCN values are shown in the exhibit. It shows that Staff's RCN value compared to the Company's rebuttal filing RCN value is lower by $29,831,271 or approximately 7.3%. It also shows Staff's RCN value compared to the Company's rebuttal filing RCN value is lower by $1,194,070 or approximately 0.3%.

Q. BASED ON YOUR REVIEW OF STAFF'S WORKPAPERS, GENERALLY, HOW DID THEY APPLY THE HANDY WHITMAN

ACCOUNT SPECIFIC INDEXES?

A. It appears in some cases Staff considered the asset description in addition to the asset class in choosing an index. That is, they did not apply the same account indexes within an asset class or category. For example, Ms. Hains uses the Handy Whitman account indexes for electric pumping equipment, small treatment equipment, steel reservoirs, and even the CPI for plant within the electric pumping equipment account category in her Sun City water district RCN study. See Bourassa Rebuttal Exhibit 8. As I have shown previously, the RCN studies previously accepted by Staff applied the same account indexes across the entire plant class. Staff has added an unnecessary element of complexity, not to mention more subjectivity, to their analysis.

Typically, the same account indexes are applied to the entire asset class. Staff used the asset descriptions to select alternative ("proxy") indexes outside of the asset class even when a specific Handy Whitman index was available. The asset descriptions were not intended to be used in such a fashion.

Q. SINCE STAFF TOOK THE TIME TO CHECK YOUR RCN STUDIES AND DEVELOP THEIR OWN RCN STUDIES, WHY DIDN'T STAFF USE THESE STUDIES IN THEIR RECOMMENDATIONS?

A. I do not know. The studies aren't mentioned in Staff's testimony. However, based on their work papers, Staff was able to prepare RCN studies and could have proposed adjustments to Arizona-American's RCND rate base, just as they did for Arizona-American's OCLD rate base.

Q. PLEASE DISCUSS THE CHANGES YOU MADE TO ARIZONA-AMERICAN'S RCN STUDY IN THE REBUTTAL FILING.

A. I made changes to the study based on my interpretation of Staff's vague responses to Company data requests 3.3 and 3.4, attached hereto as Bourassa

Rebuttal Exhibit 10. Cost indexes were changed to match the "category as closely as possible to the Handy Whitman Index, Bulletin 155." Plant removed from original cost rate base in Staff adjustments 1 and 2 was first removed before computing the revised trended values. Adjustments to RCN values were determined then by taking the difference between the revised RCN value and the RCN value in the direct filing. Rebuttal Schedule B-4, adjustment 7 shows the determined adjustments to the RCN plant base.

RCND accumulated depreciation was determined by trending, on an account basis, using a ratio of the RCN plant to the original cost plant for each account. In addition, original cost advances, contributions and customer deposits were trended using a ratio of the total RCN plant base value to the original cost plant base value.

Arizona-American's adjusted RCND rate base determination is shown on Rebuttal Schedule B-3. Hopefully, Arizona-American and Staff are now in agreement.

IV. INCOME STATEMENT

Q. WOULD YOU PLEASE DISCUSS ARIZONA-AMERICAN'S PROPOSED ADJUSTMENTS TO REVENUES AND EXPENSES AND WHAT ADJUSTMENTS, IF ANY, YOU HAVE ACCEPTED FROM STAFF AND/OR RUCO?

A. Yes. Company Rebuttal Schedule C-1 shows the rebuttal adjusted test year revenues and expenses. Adjustments are shown on Rebuttal Schedule C-2.

In summary, Arizona-American disagrees with Staff on the use of Citizens' salaries and wages and corporate overhead expenses. Arizona-American agrees with RUCO that the 2002 actual Arizona-American salaries and wages and corporate overhead expenses should be used as the base for the

adjustment. However, Arizona-American disagrees with the 2002 amounts RUCO has used. As explained below, the evidence provided by RUCO does not support RUCO's amounts.

With respect to property taxes, Arizona-American agrees with Staff on the use of two years of adjusted revenue and one year of proposed revenue in the property tax calculation. Arizona-American's computed amount differs from Staff because the proposed revenue component is different.

While Staff and RUCO have accepted the new depreciation rates proposed in Arizona-American's filing, depreciation expense differs because the original cost plant bases are different. Arizona-American has accepted the original cost plant adjustments proposed by Staff. However, Staff made an error in allocating the common plant adjustments. RUCO's plant base differs because RUCO made no adjustments to the original cost plant base, in contrast to Staff and Arizona-American. For example, RUCO does not include any post test year plant.[s1]

Arizona-American has removed the amortization of the original cost acquisition adjustment from depreciation expense, and is in agreement with both Staff and RUCO on that issue, as Mr. Stephenson explains in his rebuttal testimony.

Income tax calculations produce differing results between the parties for two reasons. First, the net taxable incomes are different due to differing proposed revenues, expenses and rate bases as between Arizona-American, Staff and RUCO. Second, RUCO employs district-specific income tax rates in its calculations rather than company-wide income tax rates.

RUCO has proposed no adjustments to purchased water expense. Staff has adjusted purchased water expense downward to match its calculation for both

the Agua Fria water district and Anthem water district. Staff claims a mismatch will result if the actual 2002 quantity of water ordered is used as opposed to the 2001 quantity of water ordered. This is not true for Agua Fria water, as I will explain below. For the Anthem water, the annualized 2001 gallons should be used in order to insure a matching of revenues and expense. I will also explain this below.

All parties agree to interest synchronization with Arizona-American's FVRB. However, interest expense is different due to differing FVRBs and weighted costs of debt.

Q. WHY DOES ARIZONA-AMERICAN DISAGREE WITH STAFF ON THE USE OF CITIZENS' TEST YEAR SALARIES AND WAGES AND CITIZENS' CORPORATE OVERHEAD EXPENSES?

A. Arizona-American's salaries and wages and corporate overhead expenses, not the Citizen's salaries and wages and corporate overhead expenses, reflect the level of the expenses on a going-forward basis. Moreover, Citizen's expenses were not "normal" as I will discuss later in my testimony.

Q. DOES USE OF ARIZONA-AMERICAN AMOUNTS CREATE A MISMATCH BETWEEN REVENUES AND EXPENSES?

A. No. Using the Citizen's amounts for these expenses creates a mismatch between revenues and expenses. The Commission's regulations governing rate applications define the term "pro forma adjustments" as "adjustments to actual test year results and balances to obtain a more normal or more realistic relationship between revenues, expenses and rate base." A.A.C. R14-2-103(A)(3)(i). Staff is well aware that Arizona-American acquired all of the utility plant and assets of Citizens in January 2002, and took over operations at that time. Using Citizens' unadjusted salaries and wages expense and Citizens'

overheads notwithstanding this change in ownership, which is obviously a known and measurable change, is not sound ratemaking.

Q. DID ARIZONA-AMERICAN USE ESTIMATES IN THE PREPARATION OF THE ARIZONA-AMERICAN SALARIES AND WAGES AND CORPORATE OVERHEADS?

A. In the direct filing, yes. However, the 2002 actual amounts are now known and measurable. In fact, the 2002 actual amounts have been known and measurable since Arizona-American's filing was accepted by Staff in January 2003. Staff could have verified Arizona-American's proposed adjustments. Staff reviewed, audited, or otherwise verified the 2002 pro-forma plant adjustments and deemed those adjustments known and measurable. Staff's position with respect to expenses is inconsistent with its position with respect to plant.

Q. ARE THERE OTHER EXAMPLES OF INCONSISTENCIES IN STAFF'S POSITION WITH RESPECT TO PROPER MATCHING OF REVENUES AND EXPENSES?

A. Yes. For Anthem water and Agua Fria/Anthem wastewater, Staff accepted Arizona-American's adjustment to revenues to include 2004 payments made by Del Webb. Staff went more than two years outside the test year to include those payments as revenue, and appears unconcerned over a mismatch in this instance.

Q. DID STAFF REVIEW, AUDIT OR OTHERWISE VERIFY ARIZONA-AMERICAN'S 2002 ACTUAL WAGES AND SALARIES AND CORPORATE OVERHEAD EXPENSES?

A. I do not know.

Q. WERE THE 2002 ACTUAL WAGES AND SALARIES AND CORPORATE OVERHEAD DATA REQUESTED BY STAFF?

A. No. Staff did request this data for 2002 plant, but only RUCO requested data for

salaries and wages and corporate overhead expenses.

Q. ARE THERE ANY OTHER REASONS WHY THE ARIZONA-AMERICAN AMOUNTS FOR THESE EXPENSES SHOULD BE USED?

A. Yes, 2001 was not a "normal" year for Citizens. Instead, Citizens' 2001 salaries and wages and corporate overhead expenses were abnormally low or understated because, by 2001, Citizens had trimmed its overheads and was selling its water and wastewater operations to Arizona-American. As a result, Citizens no longer needed a full regulatory staff and office since it was not planning to file rate cases for these operations. Further, other support staff and departments were eliminated. For example, during the test-year and into 2002, only one person ran the fixed asset accounting area where a larger staff had once been employed. Also, the corporate project management and accounting staff were largely eliminated. This is why Arizona-American ran into difficulties retrieving data from Citizens needed to respond to Staff and RUCO data requests.

Q. ARE CITIZENS' REDUCTIONS TO CORPORATE OVERHEADS REFLECTED IN THE HISTORICAL OPERATING EXPENSES?

A. Yes. I have prepared a comparison of Citizens' 1999, 2000 and 2001 corporate overhead expenses in Bourassa Rebuttal Exhibit 11, attached hereto. This exhibit shows that the 1999 and 2000 amounts for these expenses were <u>two to three times</u> Citizens' 2001 amount. Clearly, the test-year amount was <u>not</u> normal and should <u>not</u> be used to set rates on a going-forward basis. A pro forma adjustment is necessary to normalize expenses on a going-forward basis consistent with the Commission's rules.

Q. WHAT ELSE DOES YOUR ANALYSIS SHOW?

A. It shows that the proposed Arizona-American overheads in the Company's direct filing are some $1,350,000 <u>less</u> than the historical average of Citizens' 1999 and

2000 overhead. Id. at page 1. This represents a significant cost savings to the ratepayers.

Q. HOW DO THE EXPENSES COMPARE TO THE 2002 ACTUALS?

A. The exhibit shows that the 2002 actual overhead expenses some $2,512,000 less than Citizens' historical average expense. Again, this represents a significant cost savings to ratepayers. It also shows why a pro forma adjustment is needed. Without such an adjustment, an abnormally low expense level will be used to set rates in this case.

Q. HAVE YOUR PERFORMED A SIMILAR ANALYSIS FOR SALARIES AND WAGES?

A. Yes, and it shows that the 1999 and 2000 amounts for these expenses were one and a half times Citizens' 2001 amount. It also shows that the proposed Arizona-American salaries and wages in the Company's direct filing are some $660,000 less than the historical average of Citizens' 1999 and 2000 overhead. Id. at page 2. This represents a significant cost savings to the ratepayers.

Q. HOW DO THE EXPENSES COMPARE TO THE 2002 ACTUALS?

A. The exhibit shows that the 2002 actual salaries and wages are some $1,550,000 less than Citizens' historical average expense. Id. Again, this represents a significant cost savings to ratepayers. It also shows why a pro forma adjustment is needed. Without such an adjustment, an abnormally low expense level will be used to set rates in this case.

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A. The exhibit shows that the 2002 actual salaries and wages are some $1,550,000 less than Citizens' historical average expense. Id. Again, this represents a significant cost savings to ratepayers. It also shows why a pro forma adjustment is needed. Without such an adjustment, an abnormally low expense level will be used to set rates in this case.

Q. DO YOU AGREE WITH RUCO THAT THE 2002 ACTUAL SALARIES AND WAGES SHOULD BE USED?

A. Yes, however, I disagree with RUCO's amount.

Q. WHY DO YOU DISAGREE WITH RUCO'S ADJUSTMENT AMOUNT FOR 2002 ACTUAL SALARIES AND WAGES?

A. RUCO's amounts are incorrect for two reasons. First, RUCO incorrectly compiled the actual expense amounts from the data provided. I used the same data provided to RUCO in compiling the 2002 actual amounts and obtain much different results. I can only conclude RUCO made an error. Second, RUCO employed a 27% across-the-board capitalization rate. I used the actual amounts capitalized. RUCO's capitalized amounts are estimates, while my amounts are actual amounts.

Q. DO YOU AGREE WITH RUCO ON THE USE OF 2002 ACTUAL CORPORATE OVERHEADS?

A. Yes, again the actual 2002 amount should be used. However, I again disagree with RUCO's amount.

Q. WHY DO YOU DISAGREE WITH RUCO'S ADJUSTMENT AMOUNT FOR 2002 ACTUAL SERVICE COMPANY CHARGES AND OTHER

OVERHEAD AMOUNTS?

A. RUCO's total service company charges are different than my compilation of the same data provided to RUCO. Further, RUCO did not allocate their proposed adjustment properly to all Arizona districts, including the Paradise Valley water district and the Mohave wastewater district, neither of which is involved in this case. In other words, RUCO determined the level of overhead expenses, reduced Arizona-American's proposed amount by the difference and then spread the difference to the districts in this case, without regard to the amount that should have been spread to the Paradise Valley water district and the Mohave wastewater district. As a result, RUCO's amount for each district in this case is overstated.

Q. DOES THE USE OF THE ACTUAL 2002 QUANTITY OF WATER ORDERED IN THE PURCHASED WATER EXPENSE COMPUTATION CREATE A MISMATCH BETWEEN TEST YEAR REVENUES AND EXPENSE?

A. Yes, for the Anthem water district, all water delivered is purchased and is therefore dependant upon the number of customers. However, revenue has been annualized based on year-end customers in 2001. Purchased water must also be normalized to reflect the revenue annualization. Both Staff and RUCO have accepted Arizona-American's proposed revenue annualization. The amount purchased in 2001 would not be sufficient to serve the year-end customers for an entire year.

Q. HAVE YOU ADJUSTED PURCHASED WATER COSTS FOR ANTHEM WATER?

A. Yes. Since the water ordered for 2002 also includes amounts for 2002 customer growth, I calculated purchased water costs using the 2002 cost per acre foot and

the annualized 2001 gallons ordered (in acre feet). This is different than Staff's proposed purchased water which uses the 2001 actual ordered amount.

For the Agua Fria water district I did not make such an adjustment, however. Purchased water in that district is made pursuant to a CAP water use implementation plan and is not affected by the number of customers. All water delivered to customers is groundwater pumped from wells. This amount of pumped groundwater, of course, varies with customer count, but is not a component of purchased water. CAP water is delivered to the Maricopa Water District Groundwater Savings Facility and generates Annual Storage Credits. The Annual Storage Credits are recovered annually through groundwater wells permitted as recovery wells, making the groundwater extracted from those wells legally CAP water. The amount of CAP water stored and recovered is not dependant upon customer count. Rather it is being phased in on a set schedule which increases in quantity by 1,100 acre-feet per year. This phase-in of CAP water was reviewed by the Commission in Decision 63334 with the planned phase in being documented as a Finding of Fact in the Order. In summary – Arizona-American is phasing in the use of CAP water in accordance with a Commission reviewed plan of use. The phase in is on a set schedule and is not related to customer counts.

Q. THEN YOU <u>DID NOT</u> ADJUST AGUA FRIA'S PURCHASED WATER COST AND <u>DID NOT</u> ACCEPT STAFF'S ADJUSTMENT?

A. Correct.

Q. DID STAFF OR RUCO ADJUST ARIZONA-AMERICAN'S PROPOSED RATE CASE EXPENSE?

A. Staff did not. RUCO claims Arizona-American's proposed rate case expense is "exorbitant." Diaz-Cortez DT at 25. I strongly disagree. RUCO uses the

allowed rate case expense in the last Citizens' rate case in its argument that Arizona-American's proposed rate case expense is too high. However, only 6 districts were involved in Citizens' last rate case. None of the Mohave County districts were involved, and Anthem did not exist. In contrast, there are 10 districts in the current case. If you use RUCO's recommended rate case expense, adjusted for inflation, compute the cost per district (based on 6 districts) and multiply the amount by 10, the computed amount is very nearly equal to Arizona-American's proposed rate case expense. Mr. Stephenson addresses the issue of rate case expense in more detail in his testimony.

Q. HAS ARIZONA-AMERICAN REVISED ITS PROPOSED RATE CASE EXPENSE?

A. No. I believe Arizona-American has shown the proposed rate case expense is reasonable given the size and complexity of this case.

V. OTHER ISSUES – TOLLESON TREATMENT AGREEMENT

Q. HAVE YOU REVIEWED THE TESTIMONY OF STAFF AND RUCO CONCERNING RECOVERY OF THE INCREASED CAPITAL AND CONTINGENCY RESERVE COSTS UNDER THIRD AMENDMENT TO THE TOLLESON WASTEWATER AGREEMENT?

A. Yes, both Staff and RUCO recommend that the Commission defer rate recovery for the increased costs being incurred by Arizona-American until a future rate case. Staff has suggested that it is premature to recommend treatment of the capital and reserve costs until the Commission to renders a decision in the accounting order case. Direct Testimony of Darron W. Carlson at 25. Staff further asserts that surcharges are "administratively inefficient." Id. RUCO argues that the amounts being paid are not currently known and measurable and

that Arizona-American's costs cannot be recovered under an adjustment mechanism. Diaz-Cortez DT at 29-30.

Q. IS IT NECESSARY FOR THE COMMISSION TO DEFER A DECISION ON RECOVERY OF THESE COSTS UNTIL A DECISION ON THE ACCOUNTING TREATMENT IS RENDERED?

A. No, the Commission has approved the accounting order collectively recommended by Staff, RUCO, Youngtown and Arizona-American. Decision No. 66387 (October 6, 2003). Not that it ever mattered. The accounting treatment and cost recovery in rates are mutually exclusive issues. The accounting order merely allows Arizona-American to defer the costs for consideration of rate recovery, costs Arizona-American is incurring between the date of the accounting order and issuance of an order in this proceeding. But, the accounting order does not provide for cost recovery and has no impact on the ultimate cost recovery sought in this case.

Q. DO YOU AGREE WITH STAFF AND RUCO THAT RATE RECOVERY SHOULD BE DEFERRED UNTIL A FUTURE RATE CASE WHEN THE COSTS ARE MORE KNOWN AND MEASURABLE?

A. Absolutely not, the costs are now reasonably known and measurable for the ratemaking treatment sought by Arizona-American in this case. The increase in the contingencies and reserve cost, Rate Component Three, from $1,500 a month with a $90,000 aggregate to $20,000 per month with an aggregate of $200,000 is certainly a known and measurable amount. Neither Staff nor RUCO have offered any evidence to the contrary. In fact, as Mr. Schneider testifies on rebuttal, Arizona-American is already paying the increased monthly amount.

Regarding Rate Component Four, the costs to be incurred by Arizona-American for major capital improvements to the Tolleson plant, it is not disputed

that Arizona-American is presently obligated to fund an estimated $10 million of improvements before 2008, a known obligation. As for the amount not being precisely measurable, the surcharge mechanism Arizona-American has proposed will insure recovery of only actual costs, not estimates. This is precisely the reason why a surcharge is appropriate.

Q. WHAT ABOUT STAFF'S CLAIM THAT SURCHARGES ARE ADMINISTRATIVELY INEFFICIENT?

A. I cannot explain it and Staff didn't even try. But that really isn't the issue. Is there more work for Staff with a surcharge than without? Of course. How much work? Given that the Commission will more than likely require Arizona-American to submit detailed reports to support any surcharge, the vast majority of the work will be done by Arizona-American. Therefore, the question isn't whether a surcharge is inefficient, the question is whether the burden on Staff and the Commission outweighs the burden on Arizona-American if recovery is postponed.

No party to this case has challenged the prudency and benefit to ratepayers of the costs that would be subject to the proposed surcharge. Arizona-American has agreed to spend millions of additional dollars during the time the rates approved in this proceeding will be in effect to ensure continued safe and reliable wastewater service to Sun City. No one disputes that the alternative, siting, designing and building a new wastewater treatment plant, would be far more costly. Staff and RUCO do not even allege harm to ratepayers if the ratemaking treatment of the increased Tolleson costs is addressed in this proceeding. Nor can any party legitimately dispute that delaying recovery of millions of dollars of necessary and reasonable costs is prejudicial to Arizona-

American. Such harm certainly outweighs the unspecified but clearly minor inconvenience to Staff.

Q. IS IT LAWFUL FOR THE COMMISSION TO APPROVE THE REQUESTED TOLLESON SURCHARGE?

A. RUCO seems to suggest otherwise, although Ms. Diaz-Cortez did not offer any authority for RUCO's position and I understand the Commission previously has approved surcharges related to costs incurred under the Tolleson Agreement. Still, I will leave the legal argument to the lawyers. However, there are several factors that support approval of the surcharge.

First, the Commission has broad discretion in setting rates as long as it does so in the context of a rate case, like this one where fair value findings are being made. In addition, Arizona-American is seeking to recover operating expenses via the surcharge, not a return on new plant. Furthermore, the expenses are narrowly defined, fixed by contract and outside the control of Arizona-American. They are also substantial and unless the Commission approves the surcharge, Arizona-American will have to file repeated rate cases to recover these increased costs, something the Commission prohibited Arizona-American from doing.

Q. DOES THAT CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

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BOURASSA REBUTTAL
EXHIBITS AND SCHEDULES
SEPARATELY BOUND

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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WEST WATER AND WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0867**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0868**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	**DOCKET NO. W-01303A-02-0869**

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0870**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.	**DOCKET NO. W-01303A-02-0908**

REBUTTAL TESTIMONY OF

WILLIAM M. STOUT, P.E.

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I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is William M. Stout. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am President of the Valuation and Rate Division of Gannett Fleming, Inc.

Q. PLEASE DESCRIBE THE VALUATION AND RATE DIVISION.

A. The Valuation and Rate Division of Gannett Fleming, Inc. provides consulting services to public utilities and railroads. The Gannett Fleming affiliated companies employ approximately 1,900 people in 50 offices throughout the United States and Canada.

The Valuation and Rate Division has a long history of client services encompassing valuations; depreciation studies; revenue requirement, cost allocation and rate design studies; analyses of accounting systems; and acquisition and feasibility studies.

Q. PLEASE DESCRIBE YOUR EDUCATION.

A. I have a Bachelor of Science degree in Management Engineering from Rensselaer Polytechnic Institute.

Q. ARE YOU A REGISTERED PROFESSIONAL ENGINEER?

A. Yes, I am registered in the Commonwealth of Pennsylvania.

Q. ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?

A. Yes, I am a member of the National and Pennsylvania Societies of Professional Engineers, the Institute of Industrial Engineers, the American Gas Association (AGA), the American Water Works Association (AWWA), the National Association of Water Companies (NAWC), and the Society of Depreciation Professionals (SDP). I am a former member of the Rates & Charges

Subcommittee of AWWA and the Accounting Services Committee of AGA and a past president of SDP.

Q. PLEASE SUMMARIZE YOUR EXPERIENCE IN THE FIELD OF ENGINEERING?

A. While attending Rensselaer, I was employed by the Valuation Division of Gannett Fleming Corddry and Carpenter, Inc., during the summers of 1970, 1971, and 1972. My principal assignments related to valuation studies and computer programming.

After my graduation in June 1973, I was employed by the Valuation Division as a Valuation Engineer. The scope of my valuation activities has included assembly of basic data, statistical service life analyses utilizing the retirement rate and simulated plant record methods, development of cost indexes, field surveys, estimation of service life and salvage, estimation of reproduction and replacement costs, calculation of annual and accrued depreciation, calculation of trended original cost and preparation of reports presenting the results of the studies.

The scope of my cost of service activities has included the selection of customers to be demand-metered, the analysis of recorded customer demands, the development of cost allocation factors, the allocation of costs, the analysis of customers' consumption, the application of present and proposed rates to the consumption analysis, the design of rate structures, and the preparation of reports presenting the results of the studies.

Since January 1978, I have testified in support of the studies conducted under my direct supervision. In January 1980, I was assigned to the position of Manager of Depreciation and Cost Allocation Studies conducted by the Valuation Division. In June 1982, subsequent to a corporate reorganization, I became a Vice

President. I became a Senior Vice President in 1991 and attained my current position of President in 1994.

Q. DO YOUR PROFESSIONAL ACTIVITIES INCLUDE PARTICIPATION IN CONTINUING PROFESSIONAL EDUCATIONAL PROGRAMS?

A. Yes, they do. I have completed the "Fundamentals of Life Estimation," "Forecasting Service Life," and "Making and Administering [Depreciation] Policy" programs conducted by the Center for Depreciation Studies at Western Michigan University. In 1985, I became a member of the faculty of Depreciation Programs, Inc., lecturing on "Forecasting Service Life," "Fundamentals of Salvage Analysis," and "Managing a Depreciation Study". I also have been an instructor at the annual Introduction to Public Utility Accounting and Advanced Public Utility Accounting seminars sponsored by the AGA and the Edison Electric Institute and the seminars presented by the SDP at its Annual Meeting.

Q. HAVE YOU PREVIOUSLY TESTIFIED ON THE SUBJECT OF DEPRECIATION?

A. Yes, I have testified before the Missouri Public Service Commission, the Pennsylvania Public Utility Commission, the Georgia Public Service Commission, the Public Service Commission of Indiana, the New York Public Service Commission, the New Hampshire Public Utilities Commission, the Alaska Public Utilities Commission, the Texas Public Utility Commission, the Public Utilities Commission of the State of Colorado, the Federal Energy Regulatory Commission, the National Energy Board of Canada, the Canadian Radio-Television and Telecommunications Commission, the Alberta Energy & Utilities Board, the Newfoundland Board of Commissioners of Public Utilities, and the United States Tax Court on the subject of depreciation.

Q. HAVE YOU PREVIOUSLY TESTIFIED ON THE SUBJECT OF

REPRODUCTION COST OR TRENDED ORIGINAL COST?

A. Yes, I testified before the Supreme Court of Ulster County, New York on behalf of The City of New York on the subjects of reproduction cost and replacement cost.

Q. HAVE YOU CONDUCTED REPRODUCTION COST STUDIES FOR WHICH YOU DID NOT TESTIFY BEFORE A REGULATORY BODY?

A. Yes, I assisted in the conduct of numerous reproduction cost and trended original cost studies that were supported by others, and I have conducted studies for purposes other than a ratemaking proceeding. I assisted in the conduct of many trended original cost studies during the 1970's when Pennsylvania was a fair value state. Since that time, I have performed studies of current costs to inform buyers or sellers of utilities on the value of the property and have also estimated reproduction costs for the purposing of indexing such costs to the date of installation as estimate of original cost.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose of my rebuttal testimony is respond to the Direct Testimonies of Darron W. Carlson, Dorothy Hains, John A. Chelus, Lyndon R. Hammon and Marlin Scott, Jr. (collectively, "Staff") related to the Reconstruction Cost New ("RCN") studies conducted by them on behalf of the Arizona Corporation Commission (the "Commission") and the RCN studies conducted by Thomas J. Bourassa on behalf of Arizona-American Water Company (the "Company").

II. SUMMARY OF THE PARTIES' RCN STUDIES AND THEIR VALIDITY

Q. HAVE YOU REVIEWED THE RCN STUDIES CONDUCTED BY THE STAFF AND BY MR. BOURASSA?

A. Yes, I have reviewed the RCN studies conducted by Staff and by Mr. Bourassa. I believe that Staff's use of specific cost indexes and elimination of not used and

useful property in conducting their studies result in a better estimate of RCN. However, as discussed below, the differences between the two sets of studies are very small, and in the Company's rebuttal presentation, Mr. Bourassa has revised his RCN studies to more closely follow Staff's approach.

Q. PLEASE COMMENT ON THE RCN STUDIES CONDUCTED BY MR. BOURASSA ON BEHALF OF THE COMPANY.

A. Mr. Bourassa has conducted trended original cost studies as the means of determining RCN values for each district of the Company. Valuation experts have used trended original cost studies in this manner for many years. It is a cost effective and reasonable approach to the determination of RCN. In a trended original cost study, trend factors, as developed from cost indexes, are applied to the original cost by installation year of the assets being studied. Mr. Bourassa used the Handy-Whitman composite index for water plant for all assets of the Company. There is some merit to this approach as explained in Mr. Bourassa's rebuttal testimony. Mr. Bourassa applied the composite index to the original cost per books as of December 31, 2001. The results of Mr. Bourassa's trended original cost studies are reasonable approximations of the RCN values for each water and wastewater district as of December 31, 2001.

Q. PLEASE COMMENT ON THE RCN STUDIES CONDUCTED BY STAFF.

A. Although not described in their direct testimonies, the Staff engineers also conducted trended original cost studies of the plant in each district. The results of these studies are included in Staff's workpapers and are attached to Mr. Bourassa's rebuttal testimony. Staff used the Handy Whitman indexes for water utilities in the Plateau Region. Staff used the specific cost indexes for each account and applied them to the original cost of assets recorded in that account as of December 31, 2001. In addition, Staff eliminated certain unidentified and not used and useful

plant as a result of its review of the data and field inspections. Staff also did not include current measures of the value of land, organization and franchises and consents. The results of Staff's trended original cost studies also are reasonable approximations of the RCN values for each of the water and wastewater districts as of December 31, 2001.

Q. HOW DO THE RESULTS OF STAFF'S RCN STUDIES COMPARE TO THE RESULTS OF MR. BOURASSA'S RCN STUDIES?

A. The results of Staff's RCN studies for the several districts are somewhat lower than the results for each district developed by Mr. Bourassa in his original RCN studies, which accompanied his direct testimony. The Company total RCN developed by Staff is 7 percent less than the results of Mr. Bourassa's RCN as originally filed. However, the results of Staff's RCN studies are both greater than and less than the results of Mr. Bourassa's RCN studies, depending on the particular water or wastewater district at issue, after adjusting Mr. Bourassa's results to (1) reflect account specific indexes, (2) eliminate unidentified and not used and useful property and (3) reflect land and intangibles at original cost. As stated, I agree with these adjustments made by Staff.

The Company has adopted certain of Staff's adjustments and has adjusted its RCN values in its rebuttal filing. With these adjustments, the RCN values for the Company now total $380.6 million, as explained in Mr. Bourassa's rebuttal testimony, as compared to $379.4 million per Staff. This is a difference of only 0.3 percent. Schedule 9 attached to the rebuttal testimony of Mr. Bourassa presents a comparison of the results of the two sets of RCN studies. Consequently, there is no material difference between the two sets of values, and both of them provide a reasonable basis for developing a fair value rate base for each district.

III. REBUTTAL TO STAFF'S SPECIFIC CONCERNS REGARDING THE USE OF THE RCN STUDIES IN THIS PROCEEDING

Q. WHY DIDN'T STAFF RECOMMEND USE OF THE RESULTS OF THE RCN STUDIES THAT THEY CONDUCTED?

A. Staff indicates that a proper RCN study would require an inventory of plant to obtain complete and accurate descriptions of each item so that "the person preparing the study knows precisely what the plant item is so that the appropriate trend factor is applied." (E.g., Chelus Direct at 5; Hammon Direct at 4.)

Q. IS SUCH AN INVENTORY REQUIRED TO CONDUCT AN RCN STUDY?

A. No. It is not practical to expect preparation of a complete inventory of plant along with detailed descriptions and dates of installation in order to estimate the current value of the plant. The Company maintains a continuing property record ("CPR") that reflects the plant presently in service including a description, the original cost and the date of installation. Use of data from the CPR along with standard cost indexes in a trended original cost study is a far more cost effective means of determining the RCN of the plant. Periodic inspections, such as those conducted by Staff, to verify the used and usefulness of plant recorded on the books should be performed in order to assure that the RCN relates to plant that is in service.

Q. DOES THE PERSON CONDUCTING A TRENDED ORIGINAL COST STUDY NEED TO KNOW PRECISELY WHAT THE PLANT ITEM IS IN ORDER TO SELECT THE APPROPRIATE TREND FACTOR?

A. No. The cost indexes used by both the Staff and Mr. Bourassa are the Handy-Whitman indexes. Valuation experts have used the Handy-Whitman indexes for many years to trend original costs of utility plant to current measures of value. The Handy-Whitman indexes are prepared by type of utility, region of the country and plant account. Thus, in order to apply the appropriate Handy-Whitman index, the

only knowledge required is the plant account in which the asset is recorded and the year that it was placed in service.

Q. EACH OF THE STAFF WITNESSES REJECTS THE RCN STUDY OF MR. BOURASSA BECAUSE THEY "ARE NO MORE THAN 'ASSET LISTINGS' THAT LIST ALL THE PAST AND PRESENT ASSETS OF THE UTILITY." (E.G., CHELUS DIRECT AT 4; HAMMON DIRECT AT 3.) DO YOU AGREE WITH THAT ARGUMENT?

A. No, I do not. The asset listings include only those assets that remain in service as of December 31, 2001, with the exception of those assets determined by Staff to be no longer used and useful. The total original cost reflected in this asset listing is in agreement with the Company's general ledger and reflects many past retirements. It is not uncommon to identify property that is no longer used and useful during field inspections. There is a lag between plant going out of service and the recording of the retirement on the books. Further, plant not being used is sometimes kept on the books based on an expectation that it will return to service in the near future. The items of plant identified by Staff as not used and useful represent a very small portion of the RCND rate bases and do not indicate that the asset listings include all plant, past and present.

Q. IF AN ITEM OF PLANT IS NOT USED AND USEFUL AND HAS NOT BEEN RETIRED FROM THE BOOKS, TO WHAT EXTENT IS THE RCND RATE BASE OVERSTATED?

A. The RCND rate base is not overstated by the property that is not currently "not used and useful." Retirement of such items from plant in service results in equal reductions of the original cost of plant in service and the accumulated provision for depreciation. The net impact on an original cost rate base is zero. Similarly, when using the ratio of accumulated depreciation to original cost for calculating the

depreciation deduction from RCN, a lower accrued depreciation ratio would be applied to the RCN reduced by the current cost of the not used and useful assets. The net result would be little change in the RCND rate base.

Q. STAFF ALSO STATES THAT CONTRIBUTED PLANT WAS NOT PROPERLY REMOVED FROM THE PLANT IN SERVICE BASE. DO YOU AGREE?

A. No. Although the plant in service includes contributed property, a separate deduction from the RCND rate base for contributions was made by Mr. Bourassa in determining rate base. By virtue of this deduction, contributed property is not included in rate base.

Q. DO YOU AGREE WITH STAFF THAT THE HANDY-WHITMAN INDEXES SHOULD BE USED ON AN ACCOUNT BASIS RATHER THAN A SINGLE COMPOSITE INDEX FOR ALL PLANT?

A. Yes, I agree with Staff. The Handy-Whitman indexes are prepared for each account and should be applied as such. The composite index may or may not represent the weighting of accounts for a specific company. Staff's workpapers reflect the correct application of the Handy-Whitman indexes for each plant account to the surviving original cost of the Company by plant account as of December 31, 2001.

Q. DO YOU AGREE WITH STAFF THAT THE HANDY-WHITMAN INDEXES SHOULD NOT BE USED FOR GENERAL PLANT EQUIPMENT SUCH AS OFFICE FURNITURE, TOOLS, AND SO FORTH?

A. Yes, I do. However, the portion of plant represented by general equipment is relatively small, and Staff appears to have identified indexes that it considered appropriate in its calculation of RCN. The resulting trend factors appear

reasonable.

Q. DO YOU AGREE WITH STAFF THAT ORGANIZATION, FRANCHISES AND CONSENTS AND LAND SHOULD NOT BE TRENDED IN AN RCN STUDY?

A. Not entirely. Generally, RCN studies incorporate land at original cost or include land at its currently appraised value based on a separate real estate appraisal. For ratemaking purposes, it has been my experience that such appraisals are not performed and land is simply included in the current cost measure of value at its original cost. However, Organization and Franchises and Consents represent costs, expenses, and fees related to the formation of the Company and obtaining franchises and other approvals to operate from state and local governments. Such costs do increase over time with inflation, and there is a logical argument for trending the original costs recorded in these accounts to a current price level. An index that represents the general rate of inflation such as the Consumer Price Index would be appropriate for such costs.

Q. DO YOU SHARE STAFF'S CONCERNS REGARDING THE MISCLASSIFICATION OF ASSETS?

A. No. The misclassification of assets is not a significant problem in the RCN studies conducted by Mr. Bourassa. Although there are a few assets that should have been transferred to their appropriate accounts, the change in the trend factor that would have been used as a result would be relatively minor and not have a significant impact on the RCN study results. I use as evidence of this probable outcome the small variance between the RCN study results obtained by Mr. Bourassa using the overall composite index in the Company's direct filing as compared to Staff's results using account-specific indexes.

Q. DO YOU AGREE WITH STAFF THAT OVERHEADS HAVE BEEN

ADDED IN A HAPHAZARD FASHION?

A. No, I do not. As explained in the rebuttal testimony of Mr. Bourassa, overheads are allocated to projects that are in progress. Thus, the additive for overheads will vary depending on the number and size of projects presently underway. Over the course of a year, the total amount of overhead added to capital projects is appropriate. As can be seen from the small variance between the use of a composite index and the account specific index, the project to which the overhead is assigned will have little impact on the ultimate result of the RCN study.

Q. IS IT APPROPRIATE TO INCLUDE OVERHEADS IN THE DETERMINATION OF RCN VALUES?

A. Yes, it is. Overheads would be capitalized as a part of the reproduction of the assets just as overheads are capitalized today as a part of the replacement of an asset.

Q. DO YOU AGREE WITH STAFF THAT THESE CONCERNS RESULT IN RCN STUDIES, AS CONDUCTED BY MR. BOURASSA, THAT ARE "IRREPARABLY FLAWED"?

A. No, I do not. In my opinion, Staff has cured any flaws by applying the Handy-Whitman indexes on an account basis, eliminating from the RCND rate bases any property that is not used and useful, and eliminating the trending of land. Staff's studies provide a sound determination of the RCND rate bases for each water and wastewater district that can be relied on for ratemaking purposes in this proceeding. With the adjustments made by Mr. Bourassa, as described in his rebuttal testimony, Mr. Bourassa's RCN studies are now very closely aligned with Staff's RCN studies, as shown by the very small variance between his results and those of Staff. Therefore, there is no reason not to utilize these studies for ratemaking purposes.

Q. DO YOU AGREE THAT THE CONDUCT OF AN RCN STUDY IS BEYOND THE RESOURCES OF STAFF?

A. No. Staff has conducted field investigations to become familiar with the property and identify not used and useful property. Staff has applied the Handy-Whitman indexes on an account basis to the remaining used and useful property as of December 31, 2001. The result is a reasonable determination of RCN based on generally accepted valuation techniques. Staff's concerns about the need to conduct an exhaustive physical inventory are unwarranted.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

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SCHNEIDER

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BEFORE THE ARIZONA CORPORATION COMMISSION

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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	**DOCKET NO. W-01303A-02-0869**

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0870**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.	**DOCKET NO. W-01303A-02-0908**

REBUTTAL TESTIMONY OF

FREDRICK K. SCHNEIDER

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I. INTRODUCTION, PURPOSE AND NATURE OF TESTIMONY

Q. WHAT ARE YOUR NAME, EMPLOYER AND OCCUPATION?

A. My name is Fredrick K. Schneider, Manager for Arizona American Water Company ("Arizona-American" or "Company"). I have been with Arizona-American since it purchased the water and wastewater assets of Citizens Communications on January 15, 2001. Prior to that, I was employed by Citizens Water Resources since July 27, 1998.

Q. DID YOU FILE DIRECT TESTIMONY IN THIS MATTER?

A. No, however I am adopting both the Direct Testimony of Robert J. Kuta and the Supplement to Direct Testimony of Robert J. Kuta as my own testimony in this proceeding. At the time of the Company's direct filing, Mr. Kuta was Arizona-American's Manager and filed testimony concerning a number of administrative and operational issues. Mr. Kuta no longer holds the position of Manager and I have been promoted to that position. Therefore, I am adopting his testimony for all purposes in this proceeding.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose of my rebuttal testimony is to respond to certain direct testimony submitted by the Arizona Corporation Commission's Utilities Division Staff ("Staff"), the Residential Utility Consumer Office ("RUCO"), and the Town of Youngtown ("Youngtown") in this rate proceeding. Specifically, I will address the Third Amendment to the Tolleson Agreement and certain fire flows issues raised by Youngtown.

II. THIRD AMENDMENT TO THE TOLLESON AGREEMENT

Q. WHAT IS THE CURRENT STATUS OF THE THIRD AMENDMENT TO THE TOLLESON AGREEMENT?

A. At the time the Company's rate filing was made we were in the final stages of negotiating an amendment to the agreement with Tolleson governing treatment by Tolleson of wastewater flows from Arizona-American's Sun City wastewater district. The Third Amendment was executed on April 22, 2003. As discussed by Mr. Kuta in his direct testimony, the increased costs imposed on Arizona-American are significant. Definitive preliminary cost estimates are approximately $10,000,000 over the five-year period beginning in 2003 for the Company's payment of its pro rate share of Tolleson's capital expenditures to repair and upgrade its wastewater treatment plant. Those costs, billed as the new Rate Component Four, are a significant expense for the Company's Sun City wastewater district.

Q. HAVE ANY OF THE OTHER PARTIES TO THIS PROCEEDING ADDRESSED THE PRUDENCY OF THE INCREASED COSTS TO BE INCURRED BY ARIZONA-AMERICAN UNDER THE THIRD AMENDMENT?

A. No, none of the parties have expressed any concern over either the increase in Rate Component Three from $1,500 a month with an aggregate of $90,000 to $20,000 per month with a $200,000 aggregate or the cost to be incurred under Rate Component Four, currently estimated at approximately $10 million over the next five years. Instead, Staff and RUCO merely recommend that the Commission defer rate recovery for these increased costs until a future rate case. Tom Bourassa, the Company's accounting witness, will address the reasons that the recommended deferral of ratemaking treatment of these costs is inappropriate in his rebuttal testimony.

Q. WHAT IS THE STATUS OF CONSTRUCTION OF THE FIRST MAJOR CAPITAL IMPROVEMENTS SCHEDULED FOR THE TOLLESON PLANT?

A. Bid and construction documents for the Effluent Quality Upgrades required to meet regulatory requirements have already been distributed to bidders. Of the contractors selected to bid on the project, four bids were received and are being analyzed. The bidders have been notified that the City plans to make a selection in 90 days.

Q. HAS THE COMPANY BEGUN TO INCUR INCREASED COSTS PURSUANT TO THE THIRD AMENDMENT TO THE TOLLESON AGREEMENT?

A. Yes, Tolleson immediately began to bill the increased amount under Rate Component Three following execution of the Third Amendment. In addition, we expect to begin receiving invoices under Rate Component Four for costs incurred by Tolleson in connection with these significant capital improvements at any time.

Q. HOW CAN YOU BE SO CERTAIN THAT ARIZONA-AMERICAN WILL BEGIN RECEIVING INVOICES PURSUANT TO RATE COMPONENT FOUR?

A. Pursuant to the agreement, Tolleson is entitled to begin invoicing Arizona-American under Rate Component Four following issuance of an accounting order by the Commission regarding the increased costs being incurred by Arizona-American under the Third Amendment. The Commission voted to approve the requested accounting order on September 30, 2003 and issued Decision No. 66387 (October 6, 2003) formally approving the accounting order.

Q. HOW CONFIDENT ARE YOU THAT THE COST ESTIMATES PROPOSED IN THE THIRD AMENDMENT ARE ACCURATE?

A. I have reviewed them and feel they are accurate. In addition, the first improvements, which will be awarded in the next 90 days, came within six percent of these original estimates. Based on these bids, we feel that Brown and Caldwell did an excellent job estimating costs on this project, and again, no one seems to be questioning the costs themselves.

III. YOUNGTOWN FIRE SERVICE ISSUES

Q. WHEN WERE THE UTILITY FACILITIES SERVING YOUNGTOWN CONSTRUCTED?

A. For the most part, Youngtown water and wastewater systems were constructed during the 1960s through the 1980s. However, improvements to the system continue to be made on an on-going basis as necessary to maintain safe and reliable utility service.

Q. WHEN DID ARIZONA-AMERICAN ACQUIRE THE ASSETS OF YOUNGTOWN'S WATER AND WASTEWATER SYSTEMS?

A. Citizens entered into an agreement to acquire Youngstown's water and wastewater systems on December 14, 1996, and the systems were ultimately sold to Citizens. At that time, nearly all of the current facilities had already been designed and constructed. Arizona-American acquired theses facilities as part of the acquisition of all of Citizens' water and wastewater facilities in Arizona in January 2001.

Q. PLEASE BRIEFLY DESCRIBE THE TYPE OF IMPROVEMENTS MADE TO THE SYSTEM SINCE 1996.

A. There have been a number of system improvements since 1996 including the addition of 25 fire hydrants, distribution system and water supply interconnections to the Sun City system, as well as replacement of several older, shallow water mains in various portions of Youngtown. These improvements have increased the flow capacity and reliability of the Youngtown water system, which can no longer

be considered a stand-alone system. Rather, it is now a part of the integrated Sun City/Youngtown water system.

Q. WHAT IS THE CURRENT FIRE CODE FOR YOUNGTOWN?

A. Youngtown has adopted the 1997 Uniform Fire Code for all new structures constructed within the town limits.

Q HOW DOES THIS EFFECT THE EXISTING AND NEW DEVELOPMENTS WITHIN THE TOWN?

A. New developments are required to construct the needed distribution lines to provide proper fire flow and to protect their structures at the developers' cost. However, the fire flow provided to existing hydrants remains largely unchanged because the flows are restricted by the design and construction of the original distribution system by Youngstown.

Q. HAS ARIZONA-AMERICAN BEEN CONTACTED BY YOUNGTOWN REGARDING THE ADEQUACY OF WATER SERVICE TO THE TOWN'S FIRE HYDRANTS?

A. No. The first time we were made aware of Youngtown's concerns and desire to upgrade the existing water distribution system was when we received its consultant's direct testimony related to the adequacy of water service to Youngtown's fire hydrants.

Q. IS ARIZONA-AMERICAN MEETING APPLICABLE SERVICE REQUIREMENTS?

A. Yes. I would also note that the Company is not required to provide "fire flow" service. Rather, under the applicable provisions of the Commission's rules, Arizona-American is required to maintain a minimum standard delivery pressure of 20 pounds per square inch gauge (PSIG) at the customer's meter or point of delivery. A.A.C. R14-2-407.E.

Q ARE THE FIRE FLOW DEFICIENCIES CITED BY YOUNGTOWN UNIQUE TO YOUNGTOWN?

A. No, the Youngtown water distribution system is typical of small water systems and of many water systems constructed during the 60's and 70's.

Q. ABSENT THE DESIRE TO UPGRADE THE FIRE FLOW CAPABILITY OF THE YOUNGTOWN DISTRIBUTION SYSTEM, DOES IT NEED IMPROVEMENT OR REPLACEMENT?

A. No, the system is generally is good condition for its age and provides adequate and reliable service.

Q. HOW DOES THE COMPANY RESPOND TO YOUNGTOWN'S CLAIMS THAT IT SHOULD UNDERTAKE A COMMISSION MANDATED FIRE HYDRANT WATER SERVICE IMPROVEMENT PLAN TO REMEDY DEFICIENCIES IN THE COMPANY'S WATER SERVICE TO YOUNGTOWN'S FIRE HYDRANTS?

A. This rate filing is not the correct forum to properly address the fire flow and hydrant issues raised by Youngtown's consultants. The water system serving Youngtown meets all applicable regulatory requirements and Arizona-American has a track record of incrementally improving the system since purchasing the system from Youngtown. Commission orders requiring system studies or improvements should be reserved for those instances where a water provider has failed to meet established standards or where a water provider has been shown to be nonresponsive to a legitimate service concerns.

Q HOW SHOULD YOUNGTOWN'S CONCERNS BE ADDRESSED?

A. To properly address these issues, Arizona-American management and engineering personnel would need to meet with Youngtown and Fire District officials to better understand their concerns and desired time frame for improvements. Their

concerns need to be evaluated in context of the larger integrated Sun City/Youngtown water system. Engineering analysis and cost estimates will need to be prepared. Other system improvement needs, such as the aging well field, need to be considered. Cost and benefits of the various potential improvements must be weighed and their corresponding rate impacts need to be considered. Given all of these considerations, the Youngtown Fire Flow improvements would be prioritized and incorporated into the capital improvement plans of the Company.

Q ISN'T THE PROCESS DESCRIBED ABOVE THE NORMAL PROCESS OF PLANNING BY A WATER UTILITY?

A. Yes, it is the normal process used by properly managed water utilities.

Q WILL YOUNGTOWN'S FIRE FLOW AND HYDRANT CONCERNS BE ADDRESSED AS A NORMAL PART OF THE COMPANY'S FUTURE PLANNING EFFORTS.

A. Yes, now that we are aware of Youngtown's concerns, we will incorporate those concerns into our routine planning efforts.

Q. WHAT WOULD BE THE EFFECT OF THE COMMISSION ADOPTING THE RECOMMENDATION OF YOUNGTOWN.

A. It would have the effect of separating Youngtown's desire to upgrade fire flow from other system needs and priorities. In essence, improving Youngtown fire flows would be given a special priority that may not be justified.

Q HAS YOUNGTOWN AGREED TO FUND THESE STUDIES AND IMPROVEMENTS?

A. No. In response to data requests, Youngtown indicated that it wants the Commission to require the Company to agree to prepare a plan to address these fire flow issues, after which the Town will discuss funding options with the

Company. *See* Youngtown responses to data requests 1.13 and 1.14, copies attached hereto as Schneider Rebuttal Exhibit 1. At a minimum, Youngtown needs to make more of a commitment to funding the study and improvements if they are to be granted special priority.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

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SCHNEIDER REBUTTAL

EXHIBIT 1

1.13 **Referring to Youngtown's proposal, as set forth in the Pre-filed Direct Testimony of Michael E. Burton, concerning a "fire hydrant water service improvement plan" how does Youngtown propose that the costs of this plan be recovered by Arizona-American?**

RESPONSE:

Youngtown will not have sufficient information to answer this question until the Fire Hydrant Service Improvement Plan is completed. Youngtown continues to propose that Arizona-American, the Town, and the local fire department work together to develop the plan. Once the plan is completed and all facts are known, Youngtown would propose that the parties work together to arrive at the best practical solution for implementing the plan balancing the costs of the plan with any additional public protection afforded to Youngtown and its residents under the plan. Youngtown wants to make clear that the Town does not desire that the Fire Hydrant Service Improvement Plan be subject to Commission review and approval. Youngtown simply requests that Arizona-American agrees, on the record, to work with the Town and the local fire department to develop the Fire Hydrant Service Improvement Plan as a mid-range to long-range planning tool to allow the Town to continually improve the safety of its residents. Upon completion of the plan, Arizona-American and Youngtown can work together to determine how the plan should be funded.

1.14 **Is Youngtown willing to reimburse Arizona-American directly for the costs of Youngtown's recommended "Fire Hydrant Water Service Improvement Plan"?**

RESPONSE:

Same response as to data request 1.13 above.

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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WEST WATER AND WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0867**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0868**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	**DOCKET NO. W-01303A-02-0869**

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0870**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.	**DOCKET NO. W-01303A-02-0908**

REBUTTAL TESTIMONY OF

THOMAS M. ZEPP

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REBUTTAL TESTIMONY OF THOMAS ZEPP

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I. INTRODUCTION, SUMMARY AND CONCLUSIONS

Q. PLEASE STATE YOUR NAME.

A. Thomas M. Zepp.

Q. DID YOU PREPARE DIRECT TESTIMONY ON BEHALF OF ARIZONA-AMERICAN WATER IN THIS CASE?

A. Yes.

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. Arizona-American Water Company ("Arizona-American" or "the Company") asked me to update my testimony and to review and to respond where I thought it to be appropriate to the September 5, 2003 testimonies of Mr. Joel M. Reiker on behalf of the Arizona Corporation Commission Staff and Mr. William A. Rigsby on behalf of the Residential Utility Consumer Office ("RUCO").

A. Organization of Testimony

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. In this section of my testimony, I summarize my conclusions. In Section II, I present an update of my direct testimony. In making my updates I respond to some of the comments Mr. Reiker and Mr. Rigsby made about the approaches and samples I adopted to make those estimates. I also respond to Mr. Rigsby's failure to recommend a revision in his benchmark equity cost estimates to reflect Arizona-American's above-average leverage. In Section III, I respond to the contention made by several parties that my equity costs should not be applied to a fair value rate base. In Section IV, I respond to Mr. Reiker's and Mr. Rigsby's equity cost estimates made with the capital asset pricing model ("CAPM"). I restate their analyses using long-term Treasury rates. In Section V, I comment about their implementations of the DCF model. I restate Mr. Reiker's constant growth DCF model results with more appropriate growth rates and revise his multi-stage DCF

model by incorporating a second stage that recognizes investors would expect higher future growth after a period in which DPS grow more slowly than EPS. I also make two restatements of Mr. Rigsby's DCF equity cost estimates based on more realistic estimates of future issues of shares of stock (S in VS growth) and a restatement based on forward-looking estimates of sustainable growth presented by Mr. Reiker.

Q. DO YOU SPONSOR ANY SCHEDULES AND EXHIBITS TO ACCOMPANY THIS REBUTTAL TESTIMONY?

A. Yes. I have prepared 15 tables, attached at Tab A, that update my direct testimony; 14 rebuttal tables, attached at Tab B, that respond to Mr. Reiker and Mr. Rigsby's analyses; and 3 documents identified as Exhibits TZ-1, TZ-2 and TZ-3 attached at Tab C.

B. <u>Overview of key points in testimony</u>

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. I address three general issues in this rebuttal testimony. The primary issue is the cost of equity for the benchmark water and natural gas utilities. I provide an update of the equity costs I presented in my direct testimony as well as restatements of Mr. Reiker's and Mr. Rigsby's equity cost estimates to provide evidence on that issue. The cost of equity for Arizona-American is lower than when I prepared my direct testimony but is substantially higher than Mr. Rigsby and Mr. Reiker estimate it to be.

The second issue is the magnitude of the upward adjustment that should be made to that benchmark equity cost to compensate Arizona-American for its above average financial risk. To avoid an issue, I have adopted Mr. Reiker's estimate of 50 basis points and respond to Mr. Rigsby for leaving out such a necessary adjustment.

The third issue is the applicability of my equity cost estimates for Arizona-American to a fair value rate base. I respond to comments made by Mr. Carlson, Mr. Reiker, Ms. Diaz Cortez and Mr. Rigsby on this issue.

Q. DO YOU RESPOND TO MR. REIKER'S AND MR. RIGSBY'S ESTIMATES OF EQUITY COSTS FOR THE BENCHMARK SAMPLES OF WATER UTILITIES?

A. Yes. Mr. Reiker and Mr. Rigsby make equity cost estimates for their water utilities samples of 9.2% and 9.11%, respectively. Such equity cost estimates – however they were made – lack perspective about what is a fair rate of return for the water utilities samples. Rebuttal Table 1 (Tab B) provides that perspective. It shows that the utilities in Mr. Reiker's sample have authorized returns on equity ("ROEs") that average 144 basis points more than the rates of return that Mr. Reiker and Mr. Rigsby conclude is "fair" for less leveraged water utilities. It also shows that those utilities earned returns reported in September 2003 that averaged 120 basis points above their 9.2%/9.1% recommendation and that *Value Line* forecasts of rates of returns for 2004 and the period 2006-2008 in Mr. Rigsby's sample averaged 185 basis points above 9.2% and 9.1% ROEs Mr. Reiker and Mr. Rigsby recommend. The data in Rebuttal Table 1 shows that whatever the methods being used, whatever the theories being adopted, and whatever the assumptions being made by Mr. Reiker and Mr. Rigsby, the final ROE estimates being produced are unfair. It is not realistic to claim that ROEs required by the water utilities in their samples are so far below what they are actually making, actually being authorized and what *Value Line* is forecasting they will earn.

By contrast, my updated equity cost estimates for the benchmark water utilities fall in a range of 10.0% to 11.2% and are reasonable when compared to returns that are actually being made, authorized and forecasted for the publicly-

traded water utilities. See Update Table 24 (Tab A). Also, my restatements of Mr. Reiker and Mr. Rigsby's equity costs for the benchmark utilities fall in a range of 9.6% to 11.3% and thus also bracket the averages of authorized, earned and forecasted ROEs in Rebuttal Table 1. See Rebuttal Table 14 (Tab B).

Q. WHAT OTHER ISSUES DO YOU ADDRESS?

A. I also respond to the lengthy, technical rebuttal of my testimony that Mr. Reiker has presented. While Mr. Reiker is highly critical of my direct testimony (which relied on data obtained in the summer of 2002 when my direct testimony was prepared) and in places has distorted my testimony, his discussion is flawed and ultimately erroneous in a number of significant respects, as I show below. For example, he argues I made an error by using an industry average forecast of growth when a reliable company-specific forecast was not available, but then turns around and uses such an industry average forecast in Schedule JMR-7 to prepare his own estimates of growth when there are no reliable forecasts for some utilities. He also claims I relied exclusively on analysts' forecasts of growth when I did not. He mischaracterizes my testimony as being at odds with a paper by Professor Gordon when it is not. He takes a small cite from my testimony in a 1999 Oregon case out of context by claiming I advocated the use of dividend per share ("DPS") growth to make growth estimates for the constant growth DCF model when I did not. Mr. Reiker had my testimony and knew I did not propose such an approach. To support his choice of actual interest rates, Mr. Reiker argues that forecasts of interest rates by *Blue Chip* should not be adopted when his own Chart 4, on page 49 of his direct testimony, shows such forecasts have been unbiased. Such forecasts are more relevant for the future period when Arizona-American's new tariffs will be in place than are the "current" interest rates he adopts in his

analyses, which were taken from the May 7, 2003 *Wall Street Journal*, 5 months ago.

C. Specific Conclusions

Q. WHAT ARE YOUR SPECIFIC CONCLUSIONS?

A. My conclusions are:

1. Updates of my DCF and risk premium equity cost estimates indicate Arizona-American's cost of equity now falls in a range of 10.5% to 11.7%. See Update Table 24 (Tab A).

a) Updated DCF equity costs indicate a cost of equity range for Arizona-American of 10.5% to 11.0%.

b) Updated risk premium estimates indicate a cost of equity range for Arizona-American of 10.8% to 11.7%.

2. Appropriate restatements of Mr. Reiker's and Mr. Rigsby's equity cost estimates indicate Arizona-American's cost of equity falls in a range of 10.1% to 11.8%. See Rebuttal Table 14 (Tab B).

3. Mr. Reiker's adjustment of 50 basis points to account for Arizona-American having above average leverage is conservative but I adopt it in lieu of the 60 basis points adder I relied upon in my direct testimony.

4. It is appropriate in Arizona to apply a rate of return that includes my equity cost estimate to the fair value rate base. None of the testimonies of RUCO or ACC Staff witnesses address the points I presented in my direct testimony that explain why I reach that conclusion.

II. UPDATES OF DIRECT TESTIMONY AND EXHIBITS

Q. HAVE YOU UPDATED THE EQUITY COSTS IN YOUR DIRECT TESTIMONY?

A. Yes. As indicated, my updated tables are attached at Tab A.

A. Updates of equity cost estimates based on the water utilities sample

Q. WHAT IS YOUR UPDATED DCF EQUITY COST FOR THE SAMPLE OF WATER UTILITIES AND ARIZONA-AMERICAN?

A. The updated DCF equity cost for the sample of water utilities is 10.5%. In making that estimate I have adopted an average of dividend yields during the three-month

period ending August 31, 2003. This period of time overlaps the 8-week period Mr. Rigsby adopts to determine dividend yields and is more current than May 6, 2003 when Mr. Reiker collected spot prices to make his dividend yield estimates. My updated DCF equity cost estimate is shown on Update Table 13 (Tab A) and is based on the data presented in Update Tables 8, 9, 10, and 12 (also at Tab A).

B. <u>Updates of equity cost estimates based on the gas utilities sample</u>

Q. WHAT IS YOUR UPDATED EQUITY COST ESTIMATE FOR THE WATER UTILITIES THAT YOU MADE WITH DATA FOR THE GAS UTILITIES?

A. I now estimate the equity cost for the sample of seven natural gas distribution utilities ("gas utilities") is 10.5%. This equity cost is developed in Update Tables 14, 15, 16, 17 and 18 (Tab A). Mr. Reiker contends that equity cost estimates for gas utilities should be reduced by 100 basis points to obtain a proxy equity cost for water utilities. Update Table 4 (also at Tab A) shows such an adjustment is too large for the sample of gas utilities I relied upon to make equity cost estimates and that a 50 basis point reduction is more appropriate. Reducing the DCF equity cost estimate for the gas utilities and then increasing it to account for Arizona-American's above-average leverage, the indicated cost of equity for Arizona-American is 10.5%.

Q. HAVE YOU UPDATED YOUR RISK PREMIUM ANALYSES?

A. Yes. Update Tables 21, 22, and 23 (Tab A) provide updates of Tables 21, 22 and 23 in my direct testimony. All of those risk premium equity cost estimates have dropped because the forecasts of Baa bond rates are now lower than they were in mid-2002, when my direct testimony was prepared. Based on the updated risk premium analyses, Arizona-American has an equity cost that now falls in a range of 10.8% to 11.7%. See Update Table 24 (also at Tab A).

C. Responses to Mr. Reiker and Mr. Rigsby

Q. DO MR. REIKER AND MR. RIGSBY CRITICIZE YOUR ESTIMATES?

A. Yes. Mr. Rigsby stated he believes I have relied too much on the projections made by *Value Line* analysts for the 2006-2008 period to make my DCF estimates (Rigsby Direct, page 44) and, even though I do not rely on CAPM, he states my choice of a long-term Treasury rate to implement CAPM is inappropriate (Rigsby Direct, page 46).

Mr. Reiker criticizes (1) the samples of gas and water utilities I used to make benchmark equity cost estimates, (2) my conclusion that water utilities require an equity cost that is 50 basis points less than gas utilities, (3) the method I used (and Mr. Rigsby used) to compute dividend yields in the DCF model, (4) my estimates of growth used in the constant growth DCF model and (5) my risk premium estimates.

1. Utilities in Samples

Q. PLEASE TURN TO MR. REIKER'S COMMENTS ABOUT THE SAMPLES YOU HAVE USED TO COMPUTE DCF EQUITY COSTS. START WITH THE WATER UTILITIES SAMPLE. MR. REIKER CONTENDS YOU SHOULD HAVE INCLUDED CONNECTICUT WATER SERVICE AND MIDDLESEX WATER IN THE SAMPLE USED TO MAKE DCF ESTIMATES FOR THE WATER UTILITIES. WHAT IS YOUR RESPONSE?

A. I did not include Middlesex Water and Connecticut Water Service in my 2002 sample because their rapid increases in stock prices coupled with low expected growth suggested they were merger or acquisition candidates. Information for Middlesex Water has changed since last year. Middlesex Water now has a dividend yield that is close to the sample average and analysts' forecasts of growth

reported by investor services indicate Middlesex Water is expected to have 7% growth. If I had included Middlesex Water in my sample, my updated average DCF equity cost would not have changed because Middlesex Water has an estimated equity cost of 10.5%. Thus, the rapid growth in Middlesex Water stock prices I observed last year appears to have anticipated the dividend yield and forecasted growth investors now expect for it. Mr. Reiker estimates equity costs for Middlesex Water with his multi-stage growth DCF model (Schedule JMR-7) and finds Middlesex Water has a higher equity cost than any of the other water utilities in his sample. I did not include Middlesex Water in my updated DCF equity cost estimate because it was not in the sample I presented in my direct testimony.

Q. DOES THE EXCLUSION OF MIDDLESEX WATER INCREASE YOUR EQUITY COST ESTIMATES?

A. No, it does not increase them.

Q. WHAT ABOUT CONNECTICUT WATER SERVICE? DOES MR. REIKER EXPLAIN WHY CONNECTICUT WATER SERVICE HAS HAD A 50% INCREASE IN ITS STOCK PRICE WHILE STOCK PRICES FOR OTHER WATER UTILITIES INCREASED BY 12%?

A. No, he does not. Connecticut Water Service still appears to be a merger or acquisition candidate and should not be included in a sample used to estimate DCF equity costs. At page 33, lines 1-3 of his direct testimony, Mr. Reiker agrees with me that if investors have bid up a stock price in anticipation of a merger, the DCF method could understate the cost of equity. If such a merger was anticipated for Connecticut Water Service, presumably, Mr. Reiker would not include it in his equity cost estimation sample. The data Mr. Reiker provided in support of Chart 3 at page 33 of his direct testimony shows Connecticut Water Service had a price

increase of 50% in 2001, the largest price increase of any water company other than American Water Works, the acquisition of which at a significant premium was announced in September, 2001. Connecticut Water Service's price increase compares to an average increase of 12% for the five other water utilities in Mr. Reiker's sample. His Chart 3 shows stock prices for Connecticut Water Service have subsequently moved in line with stock prices for other water utilities. With reasonably efficient markets, even for a thinly-traded stock such as Connecticut Water Service, one should expect information about potential mergers and acquisitions to continue to be embedded in its stock price unless merger rumors disappear. With such a super-inflated stock price, as Mr. Reiker observes, dividend yield and DCF equity cost estimates will be biased downwards. The behavior of Connecticut Water Service stock prices shown in Mr. Reiker's Chart 3 is perfectly consistent with reasonably efficient markets in which investors expect a merger or acquisition and thus supports my choice to leave it out of the water utilities sample adopted to make equity cost estimates with the DCF model.

Q. TURN TO MR. REIKER'S COMMENTS ABOUT THE SAMPLE YOU USED TO MAKE DCF EQUITY COSTS FOR THE GAS UTILITIES. HE CONTENDS THAT CASCADE NATURAL GAS AND SOUTHWEST GAS SHOULD BE INCLUDED IN THE GAS UTILITIES SAMPLE. WHY DID YOU EXCLUDE THEM?

A. I have used the adjusted equity cost estimates for the gas utilities as another proxy for the cost of equity for my water utilities sample. All of the publicly-traded water utilities (with bond-ratings) that are in my sample of four water utilities and in Mr. Rigsby's sample of three water utilities have a bond rating of A or better. Cascade Natural Gas and SW Gas have bond ratings of BBB/Baa and thus are more risky than the sample water utilities. See Exhibit TZ-2.

Q. DO YOU HAVE ANY COMMENTS ABOUT MR. REIKER'S GAS UTILITIES SAMPLE?

A. Yes. It is puzzling why Mr. Reiker advocates including Cascade Natural Gas and SW Gas but not including South Jersey Industries. At this time, *C. A. Turner Utilities Reports* indicates South Jersey Industries has a split bond rating of Baa1/A and 78% of its revenues come from gas operations. See Exhibit TZ-2. This company meets relevant criteria to be in his DCF sample, but has been ignored. I did not include South Jersey Industries in my updated sample because last summer, when I prepared my direct testimony, *C. A. Turner Utility Reports* indicated that South Jersey Industries had only 55% of its revenues from gas operations. I do not include South Jersey Industries in the sample used to make my updated DCF equity cost estimates because it was not in the sample I used to prepare my direct testimony.

Q. WHAT IS SHOWN IN UPDATE TABLE 4?

A. Update Table 4 (Tab A) shows beta estimates for the samples of gas and water utilities at the time I prepared my direct testimony and today. Notably, there were no differences in average beta estimates when I prepared my direct testimony. However, to be conservative, I assumed the gas utilities required a 50 basis point risk premium when compared to water utilities. The average *Value Line* betas for both samples of utilities are now higher than last year, but the average beta for the gas utilities increased more. Update Table 4 indicates the difference in the required returns for gas and water utilities is very close to the 50 basis points I adopted in my direct testimony and thus I do not revise that differential.

Q. MR. REIKER'S SAMPLE OF GAS UTILITIES HAS A HIGHER AVERAGE BETA THAN YOUR SAMPLE. DO YOU HAVE ANY COMMENTS ABOUT THAT?

A. Yes. First, if he had included South Jersey Industries in his sample, his average beta would be lower because South Jersey Industries has a beta of .50. Also, last year I excluded NICOR from my sample because it was under investigation for fraud. Mr. Reiker reports NICOR now has a beta of .90, the biggest beta in his sample. Without NICOR, his sample average beta would be lower.

Q. MR. REIKER'S SAMPLE OF SIX WATER UTILITIES HAS A LOWER AVERAGE BETA THAN YOUR SAMPLE. DO YOU HAVE ANY COMMENT WHY THERE IS A DIFFERENCE?

A. Yes. Professor Richard Roll presented an analysis in 1980 that shows if stocks are thinly traded (such as small water utilities' stocks), beta estimates made with short interval data – such as weekly data used by *Value Line* to estimate betas – are expected to be biased downward. Ibbotson Associates provide data to confirm this expectation. When they estimate betas for small companies, the average beta estimated with monthly data of 1.52 increases to 1.62 when annual data are used to make the estimate. Based on this evidence and statistical estimates of betas I made in other cases, I expect the true, but unknown, betas for Middlesex Water and Connecticut Water service are closer to 1.0 than would be estimated by *Value Line*. With Middlesex Water and Connecticut Water Service in the sample, the estimated average beta would be closer to 1.0.

Mr. Reiker uses the difference in his average beta estimates to justify reducing the gas utility equity costs by 100 basis points, instead of the 50 basis points I adopt. The 100 basis points is not appropriate for the samples of water and gas utilities I adopt and, for the reasons stated above, also overstates the general differential between beta risk for these types of utilities.

2. Responses to comments about my DCF models

Q. NOW TURN TO THE ISSUE OF DIVIDEND YIELDS. MR. REIKER ARGUES THAT SPOT PRICES SHOULD BE ADOPTED TO DETERMINE DIVIDEND YIELDS INSTEAD OF AVERAGE YIELDS. WHY DON'T YOU USE SPOT PRICES TO COMPUTE THE DIVIDEND YIELDS?

A. For at least three reasons. First, there are no estimates of "spot" growth rates to combine with the estimates of spot prices. *Value Line*, for example, updates its growth rate forecasts every three months. Other investor services report forecasts of growth rates made by analysts for the last 30 to 120 days. The constraint on the quality of the equity cost estimate comes from the quality of the growth rate estimates, not from easily measured dividends and prices. Spot yields provide a false sense of accuracy and should not be used to estimate DCF equity costs.

Second, prices for thinly-traded stocks, such as water utilities, are not as efficient as prices for larger, frequently-traded stocks. This provides another reason to use average yields in the DCF model.

Third, it takes many weeks for analysts to prepare and ultimately present equity cost estimates. Allowing the analyst to choose the "spot" price also allows the analyst to bias his/her estimate of the dividend yield by choosing a price that is higher or lower than other prices he/she could have chosen during the period in which the testimony was prepared. This potential for gaming the equity cost estimate with the "spot" yield is avoided when average yields for a reasonably current period are adopted. Mr. Reiker has used spot prices for May 6, 2003 and forecasted dividends published on May 2, 2003 in his analysis. The average of dividend yields in June to August of this year that I used to update my estimates are more current than Mr. Reiker's data.

Q. MR. REIKER RAISES A NUMBER OF ISSUES RELATED TO THE GROWTH RATES YOU ADOPTED TO MAKE YOUR DCF ESTIMATES. AT PAGES 37-39 AND IN FIGURE 1, MR. REIKER ARGUES YOU MADE AN "ERROR" BY USING AN INDUSTRY AVERAGE GROWTH FORECAST FOR UTILITIES WHEN YOU DID NOT HAVE RELIABLE COMPANY-SPECIFIC GROWTH FORECASTS. DO YOU HAVE A RESPONSE?

A. Yes. His statement is equivalent to "the pot calling the kettle black", i.e., it is a correct method if he does it, but not a correct method when I do it. In Mr. Reiker's own analysis in Schedule JMR-7, his work paper (GrowthCalc, cell H 25) shows he used an industry average forecast (an average of forecasts of DPS growth rates for the water utilities for which he had forecasts) to estimate future dividend growth for Connecticut Water Service, Middlesex Water and SJW Corp when he prepared Schedule JMR-7. If the industry average forecast is the best available information, that industry average forecast is what investors would rely upon to price stocks. Mr. Reiker's direct testimony at pages 37-39 and Figure 1 should be ignored.

Q. AT PAGES 39-44, HE CONTENDS YOU RELIED EXCLUSIVELY ON ANALYSTS' FORECASTS OF EPS GROWTH TO PREPARE YOUR DCF EQUITY COST ESTIMATES. DID YOU?

A. No. Mr. Reiker says I place "exclusive reliance on analysts' forecasts of near-term earnings growth" (page 40, line 1) when I do not. In making all of my DCF equity cost estimates for water and gas utilities in both my direct testimony and in my updates in this testimony, I relied upon forecasts of sustainable growth (forecasts Mr. Reiker calls "intrinsic growth") as well as analysts' forecasts of EPS growth to make my estimates. He has mischaracterized my testimony.

Q. AT PAGE 41, HE DISCUSSES THE GORDON, GORDON AND GOULD PAPER AND A MORE RECENT SPEECH MADE BY PROFESSOR GORDON. IS YOUR TESTIMONY AT ODDS WITH GORDON'S ARTICLE AND SPEECH?

A. No. Again, Mr. Reiker mischaracterizes my testimony. I correctly reported that Gordon, Gordon and Gould ("Choice Among Methods of Estimating Share Yield," *Journal of Portfolio Management* (Spring 1989)) ("GG&G") found that forecasts of EPS growth outperformed three measures of past growth. Such a finding clearly supports the use of EPS growth as one of the measures of growth investors would examine. I never said that GG&G argued for the exclusive use of analysts' forecasts to implement the DCF model.

Also, if, as Mr. Reiker suggests should be done on page 42 of his direct testimony, GNP growth were used to make DCF equity cost estimates with the constant growth DCF model, Mr. Reiker's DCF equity cost estimate for the water utilities sample shown in Schedule JMR-8 would increase 150 basis points, from 8.5% to 10.0% if his GNP growth forecast from Schedule JMR-7 of 6.5% were used:

Equity cost = 3.47% + 6.5% = 10.0%

Q. DO YOU HAVE ANY COMMENTS ABOUT HIS TESTIMONY AT PAGE 42 TO 44?

A. Yes. I am not surprised that some writers have the view that analysts' forecasts of EPS growth have been too high after the recent stock market bubble burst and seriously damaged portfolios of many investors. It is always easy to look back now and find that the rosy future many believed was just over the hill was not realistic.

As to earlier studies, such as David Dreman's study, I did an analysis of *Value Line* ROE forecasts for gas distribution companies in 1999 and found that contrary to claims such as the one Mr. Reiker reports on page 42, line 17, of his direct testimony, in real terms (i.e., forecasts adjusted for the difference in expected and actual inflation) *Value Line* ROE forecasts for gas distribution utilities were unbiased. My analysis showed overstatements in the ROE forecasts were the result of inaccurate forecasts of inflation. Earnings per share forecasts would vary directly with ROE forecasts. Putting one's head in the sand and assuming the past will continue into the future when the future may be much different, however, is not the answer. Investors look forward and they, too, may be making poor forecasts of inflation that are the same as the poor forecasts being relied upon by analysts. But if the analysts and the investors are making the same mistakes, the cost of capital is still revealed by looking at such analysts' EPS forecasts.

Mr. Reiker's anecdotal testimony reported on these pages of his direct testimony still provides no basis to assume analysts' forecasts are not relied upon by investors when they price stocks. Mr. Reiker relies on Mr. Dreman's book. But Mr. Dreman's conclusion reported below supports an inference that investors generally do rely on the analysts' forecasts. Mr. Dreman says:

> We have also seen that in spite of high error rates being recognized for decades, neither analysts nor investors who religiously depend on them have altered their methods in any way.

David Dremand, *Contrarian Investment Strategies: The Next Generation*, 115-116 (Simon & Schuster 1998). If investors depend on the analysts' forecasts – whether the forecasts turn out to be excellent or poor forecasts – they are relevant to a determination of DCF equity costs.

3. My prior testimony is consistent with my testimony in this case

Q. AT PAGE 45-46, MR. REIKER PROVIDES TWO QUOTATIONS FROM YOUR TESTIMONY AND DEPOSITION IN UM 903, A 1998-1999 INVESTIGATION INTO AN APPROPRIATE METHOD TO DETERMINE RECOVERY OF PURCHASED GAS COSTS IN OREGON. DO YOU HAVE ANY COMMENTS ABOUT THE QUOTATIONS HE CITES?

A. Yes, his quotations were very carefully selected to imply I used DPS forecasts to determine equity costs with the constant growth DCF model in a 1999 case, when that is not true. Mr. Reiker has the full testimony and knows that is not the case. He has taken one statement in a deposition out of context and thus misrepresents the analysis I presented in that case. The first cite is to page 9 of my deposition. I have attached the title page and pages 8 through 11 of that deposition at Tab C, labeled as Exhibit TZ-1, to put the citation in context. Mr. John Thornton, now an employee of the Arizona Corporation Commission, was present and asking the questions at the deposition. My testimony (NWN/300/Zepp, dated December 17, 1998) was the subject of the deposition. It was rebuttal of Mr. Thornton's equity cost estimate presented in that case. Exhibit TZ-1 shows that (1) the quote cited by Mr. Reiker was my second response to a question proposed by Mr. Thornton and it restated the question as Mr. Thornton asked it and (2) my first response referred Mr. Thornton back to my prefiled testimony.

Q. WHAT DID YOU SAY ABOUT THE USE OF DIVIDEND PER SHARE GROWTH IN THE PREFILED TESTIMONY TO WHICH YOU REFERRED?

A. I said the following:

> Q. What do you conclude from your examination of past and forecasted EPS growth?

A. Mr. Thornton's selective exclusion of EPS growth from consideration has biased downward his estimate of future DCF growth expected by investors for at least two reasons:

> (1) EPS growth would be considered by investors in determination of future growth. Based on data in Mr. Thornton's work papers and past growth, that consideration would indicate expected growth of 6.5%, 7.8% and 8.6%. All three of these growth rates are above the range of DCF growth rates chosen by Mr. Thornton.
>
> (2) The fact that past and forecasted DPS growth rates are lower than past and forecasted EPS growth rates indicates that investors would expect the LDCs [local gas distribution companies] to be financially stronger in the future. As a result, investors would expect the LDCs to be able to sustain higher levels of dividend growth in the future than in the past and to achieve higher growth in the long term than is forecasted for the [near term] period out to 2003. (Emphasis added.)

Oregon PUC, UM 903/AR 245/NW Natural/300, pages 19-20.

Q. IS THE UM 903 TESTIMONY QUOTED BY MR. REIKER CONSISTENT WITH YOUR TESTIMONY IN THIS CASE?

A. Yes, it is. Just as I said in Oregon Docket UM 903, if EPS growth is expected to be more rapid than DPS growth, investors will expect future sustainable growth to be higher than near-term DPS growth. Future DPS growth and historic DPS growth are undoubtedly the worst measures of long-term sustainable growth in such a situation. Those measures of growth would not be relied upon by rational investors making equity cost estimates with the constant growth DCF model. Giving any weight to such DPS growth estimates will bias downward equity cost estimates.

Q. DO YOU HAVE ANY COMMENTS ABOUT MR. REIKER'S CITE AT LINES 2-4 OF PAGE 46?

A. It, too, is taken out of context. The questions and answers starting before and ending after the cite are shown below:

Q. Would investors examine information other than BR + VS growth to determine the cost of equity facing gas LDCS?

A. Yes. Investors would examine past and forecasted growth in earnings per share ("EPS"), dividends per share ("DPS") and other trends that provide indications about what future growth would be.

Q. Mr. Thornton based his growth rate range of 3.0% to 5.0% in part on past and forecasted DPS growth. If investors were to look at only EPS or DPS growth, which one would they examine?

A. Available evidence indicates they would look at EPS growth. Investors are willing to pay for compilations of investor analysts' forecasts of EPS growth, such as Standard & Poor's Earnings Guide.

UM 903/ AR245/ NW Natural/ 300, pages 17-18.

This testimony, as well as the testimony at UM 903/ AR245/ NW Natural/ 300, page 20 reported above, is consistent with my testimony in this case. That testimony is that when forecasts of DPS growth (or past DPS growth) are smaller than expected EPS growth (past EPS growth), reliance on DPS growth as the growth rate in the constant growth DCF model will bias downward the equity cost estimates.

Q. AT PAGE 46, MR. REIKER SAYS YOU RELIED UPON PAST DPS GROWTH TO PREPARE A STUDY PRESENTED IN ARIZONA DOCKET W-01445A-02-0619 (ARIZONA WATER COMPANY). IS THAT STUDY INCONSISTENT WITH YOUR TESTIMONY IN THIS CASE?

A. No, for two reasons. The study Mr. Reiker refers to was a study of differences in equity costs for small and large water utilities in California over a period of 11 years. First, there were no years when there were forward-looking forecasts of growth for the small utilities. Thus, to prepare the study, I used the only available data, i.e., past growth rate data. Second, based on data I compiled for various California cases, I knew growth rates presented by California PUC Staff showed

averages of past EPS growth, past DPS growth, and past sustainable growth estimates were approximately the same as averages of available analysts' forecasts of growth through at least 1995. See Rebuttal Table 5 (Tab B). In effect, using past growth as a surrogate for future growth, while not ideal, was acceptable because investors expected the past growth to continue during those years. But as Rebuttal Table 5 also shows, the same is not true today. Analysts and investors now expect faster growth in the future than in the past. Nothing in the study Mr. Reiker mentions is in conflict with my position that today, the worst measure of growth to use in the constant growth DCF model is past or estimates of future near-term DPS growth.

4. Forecasts of interest rates should be adopted

Q. TURN TO YOUR RESPONSE TO MR. REIKER'S CRITICISMS OF YOUR RISK PREMIUM ESTIMATES. AT PAGE 48-49, MR. REIKER ARGUES *BLUE CHIP* CONSENSUS FORECASTS OF INTEREST RATES SHOULD NOT BE RELIED UPON TO MAKE RISK PREMIUM EQUITY COST ESTIMATES. DO YOU HAVE A RESPONSE?

A. Yes. At page 49 of his direct testimony, Mr. Reiker presents Chart 4 that compares *Blue Chip Financial Forecasts* consensus forecasts of the Aaa corporate bond rate to actual rates. The data underlying the chart show that in the three years 1999 to 2001, the projected *Blue Chip* interest rates were lower than actual rates and in the two years 2002 to 2003, projected rates were higher than has occurred. On average Mr. Reiker computed that the *Blue Chip* forecasts have been 14 basis points below the rates that have actually occurred. In this particular period, the forecasts are slightly below the actual results, but his evidence provides strong support for the consensus forecasts being unbiased, and certainly not working against the interests of ratepayers.

Interest rates that should be relied upon to determine Arizona-American's cost of equity should be interest rates expected during the period in which new tariffs will be in effect. Relying on "actual" market interest rates in 2003 does not solve the problem of uncertainty about future rates. Actual current Baa rates, as well as forecasts of Baa rates, depend upon investors perceptions of what will happen in the future. As a result, the quotation Mr. Reiker offers at page 50 of his direct testimony from Jacob and Pettit cannot be a criticism of my choice to use *Blue Chip* consensus forecasts of the Baa rates. Mr. Reiker's own Chart 4 shows that to the extent there has been any difference between actual rates and the *Blue Chip* forecasts of rates, on average, bond rates turned out to be slightly higher than was estimated with the *Blue Chip* consensus forecasts.

In Mr. Reiker's CAPM testimony, he adopted actual rates instead of forecasts of those rates to make CAPM estimates. The following simplified explanation of 5-year interest rates illustrates the problem:

Year	2003	2004	2005	2006	2007	5-year Average
Interest rate for one year	1%	4%	4%	4%	4%	3.4%

In my illustration, the reported 5-year interest rate (also the average of five one-year interest rates) is 3.4%, but in four out of the five years after 2003, the interest rate is 4%. The relevant rate to determine a cost of money when setting tariffs that will not be authorized until 2004 is not 3.4%, but is 4%. Forecasts of interest rates or "forward rates" (that back out the 2003 rate) provide the relevant interest rate for the period in which Arizona-American's new tariffs will be established. Based on actual market data on September 10, 2003, the current 10-year Treasury rate of 4.27% is 36 basis points below the forward 10-year Treasury rate expected by investors next year (4.63%). And, the 4.63% forward rate is 83 basis points (4.63% minus 3.8%) above the 10-year Treasury rate Mr. Reiker relied upon to

prepare his equity cost estimates. (Reiker Direct, page 23, footnote 11.) For perspective, the forward rate of 4.63% rounds to the *Blue Chip* June 2003 consensus forecast of 4.6% for 2004.

For similar reasons, forecasts of Baa rates are preferred to current Baa rates. They provide estimates of the costs of corporate bonds expected when the new tariffs for Arizona-American will be in place. To the extent that current short-term interest rates are lower than interest rates expected in the future, the use of current interest rates will understate the relevant cost of equity. *Blue Chip* forecasts reflect the pure forecast of the rates after the 2003 short-term rates are history. With interest rates currently very low, compared with interest rates over the past several decades, the chance future rates will be higher than rates today is much better than the chance they will be lower. As a result, the forecasted rates should be used.

Q. AT PAGE 50, MR. REIKER SAYS THE CAPM SHOULD BE USED INSTEAD OF YOUR RISK PREMIUM APPROACHES. DO YOU HAVE ANY RESPONSE TO THAT TESTIMONY?

A. Yes. My response is in Section IV of my testimony, below.

5. Risk premium estimates based on Baa bonds are currently superior to risk premium estimates based on Treasury securities.

Q. REFERRING TO PAGE 51, LINE 6, OF MR. REIKER'S TESTIMONY, DOES THE FACT THAT CORPORATE BONDS HAVE DEFAULT RISK MEAN ONLY TREASURY SECURITIES SHOULD BE USED TO COMPUTE RISK PREMIUM ANALYSES?

A. No. Such a statement implies equity costs are more closely tied to costs of Treasury securities than to the utilities' own costs of debt. It is more logical to expect equity costs to reflect changes in corporate debt costs than to assume those equity costs move in lockstep with interest rates the government can obtain in the

market. Mr. Reiker says bonds include default risk that is diversifiable and thus there can be no meaningful comparison between corporate bond costs and equity costs. His observation, however, does not address the relevant issue.

Q. WHAT IS THAT ISSUE, DR. ZEPP?

A. The relevant issue is whether the Baa bonds I used in my analyses or Treasury bond rates provide more reliable estimates of the cost of equity. In cases five or six years ago, I usually conducted risk premium analyses using government bonds instead of corporate bonds. But, in the last several years, there has been a strong demand for Treasury securities that has little to do with them being the "default-free" bond of the textbooks. In part, government bonds have been demanded because investors anticipated the government will be issuing fewer bonds and thus institutions that have requirements for certain percentages of government bonds in their portfolios have bid up the government bond prices. Also, with the drastic drop in the stock market in 2001, the slow recovery from recession and other investors concerns, there has been a "flight to quality" which has also bid up demand to unusual levels.

Rebuttal Table 2 (Tab B) shows the spread between Baa corporate bond rates and 10-year Treasury rates during the last two years is 50% higher than the average spread from 1982 to 1998. Even though forecasters predict that spread will be moving back toward levels experienced in the past, the higher relative demand for Treasuries is expected to continue into the immediate future. For purposes of constructing a risk premium analysis based on historical data from 1982 to 2002, the higher yield spread today and forecasted for the future creates a problem. If the risk premium is based on an average of data for the 1982 to 1998 period, for example, that risk premium will be too small to combine with current

Treasury rates. Thus, combining current or forecasted rates for Treasuries with such past realized premiums understates the cost or equity.

Q. DO YOU HAVE ANY EVIDENCE THAT Baa CORPORATE BOND RATES ARE PREFERRED TO TREASURY RATES?

A. Yes. That evidence is presented in Rebuttal Table 3 (Tab B). I used updated data from Table 22 presented in my direct testimony as the measure of the cost of equity and ran statistical regressions to see if 10-year Treasury rates or Baa corporate bond rates provided the better explanation of the dependent variable (equity costs) considered in each analysis.

Q. WHAT DID YOU FIND?

A. I found that for the entire period 1982-2002 and for the most recent four-year period, Baa corporate bond rates provide a better explanation of equity costs than do 10-year Treasury rates. During the full 1982-2002 period, both measures of interest rates provide good explanations of equity costs, but Baa rates do a better job of explaining the level of equity costs (R^2 = 84.5%) than do 10-year Treasury rates (R^2 = 82.0%). As expected, based on the known "flight to quality" in the most recent four year period, the relative performance of 10-year Treasuries (R^2 = 8.9%) compared to Baa rates (R^2 = 18.3%) was much poorer than in the full 1982-2002 period and Baa rates provide the stronger explanation of equity costs.

Q. WHAT DOES YOUR STUDY TELLS US ABOUT COMPARING EQUITY COSTS AND RISK PREMIUMS TO CORPORATE BONDS AND TO TREASURY RATES?

A. It tells us that, contrary to Mr. Reiker's contention at page 51 of his direct testimony, Baa bond rates are preferred to Treasury rates when making risk premium estimates.

Q. REFERRING TO PAGE 50, MR. REIKER SAYS THE CAPM SHOULD BE RELIED UPON INSTEAD OF YOUR RISK PREMIUM APPROACHES. DO YOU HAVE A RESPONSE?

A. Mr. Reiker is wrong. I will discuss this issue in section IV, below.

6. Other responses to criticisms of risk premium estimates

Q. REFER TO MR. REIKER'S DIRECT TESTIMONY AT PAGE 53. SHOULD ANY WEIGHT BE GIVEN TO STAFF'S "CONCERNS" WITH THE RISK PREMIUM ANALYSIS YOU PRESENTED IN TABLE 21?

A. No. The data used to prepare Table 21, attached to my direct testimony, were taken from a publicly available document I refer to in footnote "a" of Table 21. That document was the work paper. I gathered additional information and prepared Rebuttal Table 4 (Tab B) in response to ACC Staff's testimony. Rebuttal Table 4 shows: (1) The water utilities in the CPUC sample are the companies in Mr. Reiker's sample plus American Water Works. (2) The utilities in the CPUC sample are seven of the companies in the group of utilities followed by *C. A. Turner Utility Reports*. (3) On average, for the period 1991-2000, the seven water utilities earned ROEs that were 48 basis points lower than authorized. The data in Rebuttal Table 4 respond to Staff's concerns. It shows my estimate of the difference between authorized and actual returns was 48 basis points instead of the more conservative 40 basis points I used in my analysis.

Q. DO YOU HAVE ANY COMMENT ABOUT MR. REIKER'S REBUTTAL OF THE RISK PREMIUM ANALYSIS YOU PRESENTED IN TABLE 22?

A. At lines 8-18 of page 42 of my direct testimony, I explained why it is appropriate to consider authorized ROEs as measures of the cost of equity and pointed out the FERC Staff has made such a determination in the past. I will not repeat that testimony again.

Q. DO YOU HAVE ANY COMMENTS ABOUT MR. REIKER'S CRITIQUE OF THE RISK PREMIUM ANALYSIS YOU PRESENTED IN TABLE 23?

A. Yes. Based on the data underlying Chart 6 on page 54 of Mr. Reiker's direct testimony, the current natural gas utility beta is the same as the average beta over the period shown in Chart 6. I do not agree that beta risk is the only systematic risk that is relevant to investors, but if one limits consideration of risk to Mr. Reiker's measure of risk, Mr. Reiker's Chart 6 supports the use of the risk premium analysis I present in Table 23, attached to my direct testimony, and my update of that analysis in Update Table 23 (Tab A). Based on Mr. Reiker's work papers, beta risk for gas utilities is the same today as it has been, on average, during the period the average risk premium was estimated.

Q. TURN TO PAGE 55 OF MR. REIKER'S DIRECT TESTIMONY. DO YOU HAVE A RESPONSE TO HIS CRITICISM OF THE CAPM APPROACH YOU PRESENTED AT PAGES 45-48 OF YOUR DIRECT TESTIMONY?

A. Yes. I provide those comments in Section IV, below.

Q. DO YOU HAVE A RESPONSE TO MR. REIKER'S DIRECT TESTIMONY AT PAGE 57 REGARDING YOUR GENERAL OBSERVATIONS AT PAGE 21 OF YOUR DIRECT TESTIMONY?

A. Mr. Reiker misstates my testimony. I compared authorized ROEs for Arizona utilities during the period 1997 to 2001 (shown in my Table 7) to interest rates that prevailed during the same period (my Table 6). This comparison showed that in all but the most recent case, the authorized ROEs for Arizona utilities were in a range of 10.5% to 12.0% when the interest rates were in a range of 7.22% to 8.37%. As shown in Rebuttal Table 1, such authorized ROEs in Arizona are in line with the ROEs earned and authorized for utilities in Mr. Reiker's sample of publicly traded water utilities. Mr. Reiker argues that interest rates going back to

1967 are of interest when they have nothing to do with the comparison I presented. In the period prior to 1997, equity costs would have been higher when interest rates were higher.

D. <u>Arizona-American is more leveraged and should be authorized a risk premium of at least 50 basis points to reflect its added financial risk</u>

Q. PLEASE TURN TO YOUR COMMENTS ABOUT ARIZONA-AMERICAN BEING MORE RISKY THAN PUBLICLY TRADED WATER UTILITIES. BEGIN WITH YOUR ADJUSTMENT FOR THE COMPANY BEING MORE LEVERAGED. DOES MR. REIKER DISAGREE WITH YOUR APPROACH?

A. No. He does not find any fault with the Miller-Modigliani methodology I relied upon, but argues the Hamada methodology he uses should be adopted. Both of the methods Mr. Reiker and I present indicate Arizona-American requires a risk premium for its above-average financial risk. To eliminate an issue, I adopt the 50 basis point adder to the cost of equity produced with Mr. Reiker's approach.

Q. LET'S TURN TO RUCO'S TESTIMONY, DR. ZEPP. DOES MR. RIGSBY MAKE ANY ADJUSTMENT IN HIS EQUITY COST RECOMMENDATION FOR ARIZONA-AMERICAN BEING MORE LEVERAGED?

A. No.

Q. ARE THERE PROBLEMS WITH MR. RIGSBY'S ANALYSIS OF LEVERAGE?

A. Yes. The first problem is that Mr. Rigsby compares capitalization ratios for his three water utilities that include short-term debt with capitalization ratios for Arizona-American that are based on permanent financing that does not include short-term debt. He makes an apples to oranges comparison. Had he compared

capitalization ratios for all utilities that were based on permanent capital – as Mr. Reiker and I do – he would have found Arizona-American is more leveraged. See Mr. Rigsby's direct testimony at pages 38 and 40 and Schedule WAR-10. Second, short-term debt is used to finance construction work in progress and is turned into permanent financing when those projects go into rate base. Leverage considerations should be related to rate base. Third, short-term debt can vary widely from time-to-time and thus does not provide a good picture of the permanent level of financial risk being borne by the various utilities.

Q. SHOULD MR. RIGSBY'S EQUITY COST ESTIMATES BE ADJUSTED FOR ARIZONA-AMERICAN BEING MORE LEVERAGED?

A. Yes. Mr. Rigsby's equity cost estimates should be increased by no less than the 50 basis point adder adopted by Staff to account for Arizona-American having above-average financial risk.

Q. ARE THERE OTHER REASONS ARIZONA-AMERICAN SHOULD BE PROVIDED A RISK PREMIUM ABOVE THE COSTS OF EQUITY ESTIMATED FOR BENCHMARK WATER UTILITIES?

A. Yes. Arizona-American has additional business risks not faced by the water utilities in their samples. I discussed those risks in my direct testimony at pages 20-21. To eliminate issues, however, I do not include a risk premium for such added business risks.

III. <u>IT IS APPROPRIATE TO APPLY MY EQUITY COST TO A FAIR VALUE RATE BASE</u>

Q. PLEASE SUMMARIZE YOUR POSITION ON THE FAIR VALUE RATE BASE ISSUE.

A. Arizona-American asked me to review certain published decisions of Arizona appellate courts and express my opinion as an economist concerning the rate base

to which my cost of equity estimate should be applied. My review indicated the Arizona Constitution and Arizona Supreme Court decisions require that a Fair Value Rate Base ("FVRB"), not an original cost rate base ("OCRB"), be adopted as the rate base when setting rates. The FVRB was defined by the Arizona Supreme Court in the *Simms* decision as the value of the properties "at the time of inquiry", i.e., when rates are set, and not the value at the time of investment.

The goals of regulation are efficiency and equity. The goal of efficiency means regulators attempt to set rates at the lowest level of costs that are consistent with reliable service for customers while allowing the utility an opportunity to earn a just and reasonable return. The goal of equity means that the utility is entitled to an opportunity to earn a just and reasonable return on the value of its property that it employs for the convenience of the public. In competitive markets, the interaction of supply and demand forces prices to cost. In the case of monopoly services, regulators replace the forces of competition and set prices to recover those costs. In many states, rate base is based on costs at the time of investment (i.e., original cost) and a reasonable rate of return is found by applying the cost of capital (debt and equity) to the depreciated value of those original cost investments. In Arizona, however, such original costs are not the basis for ratemaking. In Arizona, the goal of equity requires application of the cost of equity to a FVRB. Based on the Arizona Constitution and Arizona court decisions, investors would expect that as the "value at the time of inquiry" increases or decreases, that their dollar returns would increase or decrease to reflect the higher or lower value of the dollars originally invested to provide service to ratepayers.

Q. DO ACC STAFF AND RUCO AGREE WITH YOUR ECONOMIC INTERPRETATION OF REQUIREMENTS OF THE ARIZONA CONSTITUTION AND ARIZONA SUPREME COURT DECISIONS?

A. No. Mr. Rigsby and Marylee Diaz Cortez from RUCO disagree with me as do Mr. Reiker and Darron Carlson of the ACC Staff.

Q. MR. CARLSON STATES IT IS NOT THE NORMAL PRACTICE TO CALCULATE REQUIRED OPERATING INCOME BY MULTIPLYING THE COST OF CAPITAL TIMES THE FVRB AND THAT OFTEN UTILITIES DO NOT EVEN SUBMIT RCND STUDIES. PLEASE PUT HIS COMMENT IN PERSPECTIVE.

A. RCND studies provide a well-established measure of the value of investment at the time of inquiry. It is my understanding that in past cases, when RCND studies were submitted by a utility, the FVRB was usually determined as an average of the OCRB and RCND valuation. But in such cases, the return on FVRB was a sham – the ROR was first determined on OCRB and then simply restated to be a lower (or higher) return on FVRB. RCND studies are costly and complicate the rate case. If the utility does not expect the ACC to authorize higher earnings than would be received on an OCRB, it is not surprising for the utility to avoid the cost of the RCND study and stipulate to the use of the OCRB as the FVRB.

Q. MR. CARLSON STATES AT PAGE 7 THAT APPLICATION OF THE COMPANY'S COST OF CAPITAL TO ITS RCND RATE BASE OVERSTATES THE COMPANY'S REVENUE REQUIREMENT. DOES IT?

A. No. In drawing such a conclusion, Mr. Carlson ignores the requirements of the Arizona Constitution and decisions by the Arizona courts. As I read those court decisions, the Company's revenue requirement includes multiplication of the cost of capital times a FVRB. This methodology was commonly used during the first half of the 20th century, when fair value was the rule (and when Arizona's Constitution was adopted). For example, in the *Bluefield Waterworks* decision,

which is still cited today as authority for what constitutes a fair return on rate base, the U.S. Supreme Court stated:

> Rates which are not sufficient to yield *a reasonable return on the value of the property used at the time it is being used to render the service* are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment. This is so well settled by numerous decisions of this court that citation of the cases is scarcely necessary[.]

262 U.S. 679, 690 (1923) (italics added). In the next section of this decision in discussing the rate of return on the utility's FVRB, the U.S. Supreme Court stated:

> A public utility is entitled to such rates as will permit it to earn *a return on the value of the property which it employs for the convenience of the public* equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are intended by corresponding, risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.

262 U.S. at 692-93 (italics added).

The use of an RCND rate base is appropriate and consistent with the "fair value" concept, which requires that the utility's plant and property be valued at the time rates are set, as opposed to when the plant was originally constructed or when the investment was originally made.

Q. AT PAGE 63 OF HIS TESTIMONY, MR. REIKER ARGUES THAT YOUR PROPOSAL WOULD PROVIDE A WINDFALL GAIN TO INVESTORS. DOES IT?

A. No. Mr. Reiker's statement presumes investors expect to earn a return on the original dollars invested. As I have explained above and in my direct testimony, investors should not expect that to be the case. Based on the Arizona Constitution,

Arizona court decisions and voters turning down changes in the Arizona Constitution, investors should expect to earn a return on the "value of the property used at the time it is being used," as the U.S. Supreme Court said in *Bluefield.* That dollar return will be either higher or lower – and would only be the same return by accident – than the return earned on OCRB. The higher dollar return resulting from Arizona-American having assets worth more than original cost less an acquisition adjustment should be expected by investors, and thus there is no windfall gain. At page 64 of his direct testimony, Mr. Reiker also argues that unless OCRB is adopted to set rates, that a windfall gain (loss) would result. This statement also ignores information available to investors, who would be familiar with the "fair value" concept and be aware that in Arizona, such concept still applies. In other words, the particular rate setting system in Arizona still employs (or is supposed to employ) "fair value" in establishing a utility's rate base, and investors presumably are aware of Arizona's system of regulation, just as they are aware of the particular rate setting systems in other states.

Q. AT THE BOTTOM OF PAGE 63 OF HIS DIRECT TESTIMONY, MR. REIKER ARGUES THAT YOUR PROPOSAL WOULD BE CONFISCATORY IF IT RESULTS IN A LOWER RETURN. DO YOU AGREE?

A. No. Again, investors should be aware that in Arizona, the Constitution and Arizona court decisions could lead to changes in the value of rate base used to set rates. At page 65, Mr. Reiker says that if there is a drop in the Company's RCND rate base, the Company could not maintain its credit. For perspective, utilities operating in states that use OCRB to set rates have had to write off investments that had negative impacts on existing common stock investors. In such cases,

common stock investors had one-time losses and costs of debt and equity may have temporarily increased, but most of those utilities survived.

Q. MR. REIKER NOTES YOU HAVE NOT MADE THIS RECOMMENDATION FOR OTHER ARIZONA WATER UTILITIES. DO YOU HAVE A RESPONSE?

A. Yes. I was not asked to address this issue in other cases and had not read the decisions I referenced in my direct testimony.

Q. PLEASE TURN TO RUCO'S COMMENTS. PLEASE BEGIN WITH MS. MARYLEE DIAZ CORTEZ'S TESTIMONY AT PAGE 9 OF HER DIRECT TESTIMONY. DOES YOUR INTERPRETATION OF THE REQUIREMENT TO USE FVRB "DOUBLE-COUNT" INFLATION?

A. No. Determination of the FVRB requires the ACC to recognize the value of assets used to provide service "at the time of inquiry". Possibly, the value of the assets at the time of inquiry will be higher than the value "at the time of investment". If that is the case, past inflation in plant costs could be determined by factors, such as factors provided by Handy-Whitman indexes to determine the FVRB. Those factors are entirely different than the forward-looking inflation factors of concern to investors. Whatever inflation factors are in the costs of capital, they are investor forecasts of the future – not the past. Moreover, those inflation factors in the cost of capital are not plant specific, but would reflect the more general level of inflation in the economy expected in the future. The fallacy in Ms. Diaz Cortez's analysis is seen most clearly by examining a situation in which the value of the plant at the time of inquiry is lower than original cost. In such a case, there would be negative inflation (deflation) used to determine the FVRB, but the cost of capital would still reflect the opportunity cost of capital and include positive inflation, if that's what investors anticipate.

Q. IS THERE ANY MERIT IN MS. DIAZ CORTEZ'S THREE COMBINATIONS OF DIFFERENT RATE BASES AND DIFFERENT RETURNS DISCUSSED AT PAGES 10 AND 11 OF HER TESTIMONY?

A. No. Her various combinations do not address the requirements of the Arizona Constitution. At the bottom of page 10 and in her examples on page 11-12 of her direct testimony, she suggests my proposal would overstate the revenue requirement. Above, I have already explained why that is not the case. She assumes the revenue requirement must be based on an original cost rate base even though the Arizona Constitution and Arizona Supreme Court decisions like *Simms* and *U.S. West* interpreting the Arizona Constitution say that is inappropriate. Prior decisions involving the use of a FVRB, like *Bluefield Waterworks*, appear to regard the determination of the FVRB and the rate of return on rate base as being independent, not interrelated, as the quotations above indicate.

Q. PLEASE TURN TO MR. RIGSBY'S COMMENTS ON THIS ISSUE.

A. Mr. Rigsby addresses this issue at page 42 of his direct testimony. He expresses a concern that the requirements of the Arizona Constitution, which have not been recognized in the past, could lead to more rate increases than rate decreases. He does not offer any reason, however, for ignoring the cost of service – as defined in the Arizona Constitution – when setting rates in this state.

IV. <u>RESTATEMENTS OF RUCO AND ACC STAFF CAPM ESTIMATES</u>

Q. HOW IS THIS SECTION OF YOUR TESTIMONY ORGANIZED?

A. Mr. Reiker and Mr. Rigsby implement the CAPM with different assumptions than I made in direct testimony. In this section of my testimony, I explain why the CAPM approach I presented in direct testimony produces conservative estimates of the cost of equity, discuss problems with the methods adopted by Mr. Reiker

and Mr. Rigsby and present restatements of their CAPM results using long-term Treasury rates as the risk-free rate.

A. <u>The CAPM approaches adopted by RUCO and ACC Staff understate the cost of equity for water utilities</u>

Q. WHAT VERSION OF THE CAPM WAS USED BY MR. RIGSBY AND MR. REIKER TO MAKE THEIR CAPM ESTIMATES?

A. Both Mr. Reiker and Mr. Rigsby adopt a version of the CAPM written as

(1) Equity cost = R_F + Beta x [$E(R_M)$ - R_F]

where the return for a Treasury security (R_F) is adopted as the measure of the required return for an asset with a beta of zero, beta is the risk of the utility relative to changes in market returns, and [$E(R_M)$ - R_F] is a market risk premium over R_F. This form of the CAPM is usually called the Sharpe-Lintner version of CAPM after William Sharpe and John Lintner who originally derived it.

Q. ARE THERE MORE GENERAL SPECIFICATIONS OF THE CAPM?

A. Yes. The one I address in this testimony is usually called the "zero-beta" version of the CAPM. It is written as

(2) Equity cost = R_Z + Beta x [$E(R_M)$ - R_Z],

where R_Z is the return required by the asset with a beta of zero. In this more general form of CAPM, R_Z replaces R_F as the risk-free asset. It is this more general version of the CAPM that I had in mind when I adopted long-term Treasury rates to make CAPM estimates in my direct testimony. I explain in footnote 14 of my direct testimony that empirical tests of the CAPM have found the zero-beta asset requires a higher return than Treasury-bills, the original value adopted by scholars for R_F.

Q. WHY IS THE VALUE FOR R_Z IMPORTANT?

A. It is important because the choice of the return for the zero-beta asset will have an impact on the cost of equity estimate. CAPM calls the relationship between required returns (in a graph, on the vertical or "y" axis) and beta risk (on the horizontal or "x" axis) a "Security Market Line" ("SML"). That SML will slope upward to the right reflecting that as risk increases required returns also increase. If R_Z is larger than R_F, the SML will be a flatter line than the SML of the original Sharpe-Lintner version of CAPM and all stocks will have equity costs closer to the cost of equity for an average risk stock. This means equity costs made for low beta stocks (like water utilities) with the Sharpe-Lintner version of CAPM will be biased downward.

Q. ARE THERE GOOD REASONS TO EXPECT R_Z IS LARGER THAN R_F?

A. Yes. The Sharpe-Lintner model is based on an assumption that investors could borrow and lend money at the Treasury bill rate. This is a strong assumption because it is obvious that we can loan money to the Federal Government at the Treasury bill rate by buying Treasury bills; however, we are all more risky as borrowers than the Federal government and thus cannot borrow money at such a low rate. Fischer Black presented several other reasons why the return required by the zero-beta asset is above the return required for Treasury bills. (Fischer Black, "Return and Beta," *Journal of Portfolio Management*, 8-18 (Vol. 20, No. 1, Fall 1993 p. 8-18).)

B. <u>CAPM tests indicate the cost of equity for water utilities is higher than is indicated by the models used by Mr. Reiker and Mr. Rigsby</u>

Q. BASED ON THE CAPM TESTS, WHAT IS THE DIFFERENTIAL BETWEEN R_F AND R_Z?

A. Fama and MacBeth (Eugene Fama and James MacBeth, "Risk Return and Equilibrium: Empirical Tests," *Journal of Political Economy*, 607-636 (May/June

1973)), found the required return on the risk-free asset was equivalent to 7.32 percent per year when the average Treasury bill return was 1.56 percent per year during the period studied. Professor William Sharpe reports these results in his book *Investments*, at page 401 (Third Edition). Those results suggest that, on average, the zero-beta return is expected to be 576 basis points above Treasury bill returns, 476 basis points above intermediate-term Treasury security yields and 436 basis points above the return investors require for long-term Treasury securities. These differences based on differences in equity risk premiums reported by Ibbotson Associates in Table 9-1 of their *2003 SBBI Yearbook*.

Fischer Black (1993) updated tests of the CAPM that he made with Jensen and Scholes in 1972 with data for the periods 1931-1991 and 1966-1991. He found a portfolio with a beta of approximately 0.5 required returns in excess of what the traditional Sharpe-Lintner CAPM would predict of 1 percent and 3 percent, respectively. Those results imply a risk-free (zero-beta) asset requires a return in the most recent period that is 600 basis points higher than the Treasury bill return. (This result is found by extrapolating the excess returns of 3 percent for a stock with a 0.5 beta back to the vertical axis to get 6 percent when beta is zero. At a beta of 1.0, there is no bias.)

Q. HAVE YOU USED THE INFORMATION FROM THOSE TESTS OF CAPM TO RESTATE MR. RIGSBY'S AND MR. REIKER'S CAPM ESTIMATES?

A. Yes. I have restated their results using forecasted values for long-term Treasury rates expected during the period new tariffs are to be in effect. As I explained above, such a restatement is expected to produce a conservative estimate of the cost of equity because the CAPM tests indicate the return for the zero-beta asset is higher than the return on long-term Treasury securities. Some analysts have

chosen long-term Treasury securities to implement the CAPM by noting that investors price common stocks to reflect long-term returns and thus conclude that the longest Treasury security returns are relevant for determining equity returns. A better reason to make the choice is that empirical tests of the original CAPM discussed above found that the required return for the zero-beta asset is higher than either Treasury bill rates or intermediate-term Treasury rates. Also, the Treasury rate should be for the future, not 2003. My restatement of Mr. Reiker's CAPM results are shown below:

Mr. Reiker (water utilities):

Equity cost	=	5.6%	+	.59 x 7.0%	=	9.7%
Equity cost	=	5.6%	+	.59 x (17.9% - 5.6%)	=	12.9%
				Average	=	**11.3%**

Mr. Reiker (gas utilities):

Equity cost	=	5.6%	+	.69 x 7.0% - 1.0%	=	9.4%
Equity cost	=	5.6%	+	.69 x (17.9% - 5.6%) - 1.0%	=	13.1%
				Average	=	**11.3%**

The 7.0% market risk premium in the restatement of Mr. Reiker's CAPM results is from the same table Mr. Reiker relied upon for his premium above intermediate-term rates, but is for the long-term equity risk premium. The forecasted value for the long-term Treasury rate of 5.6% is an average of the *Blue Chip* consensus forecast of Treasury rates for 2004 and 2005. As I explained above, the use of "actual" current Treasury rates will understate the cost of equity during the period new rates for Arizona-American will be in place.

Mr. Rigsby presented both an arithmetic long-term average and a geometric long-term average market return to estimate a range of CAPM returns. He relies,

however, on the arithmetic return. Restating his analysis with the long-term Treasury rates as the proxy for the zero beta asset, the indicated equity cost is

Mr. Rigsby (water utilities):

Equity cost = 5.6% + .63 x (12.2% – 5.6%) = 9.8%

Q. AT PAGE 56 OF HIS DIRECT TESTIMONY, MR. REIKER SUGGESTS THAT STAFF'S CAPM APPROACH ALREADY CORRECTS FOR THE BIAS FOUND IN THE CAPM TESTS. DO YOU HAVE A RESPONSE?

A. Yes. At page 56 of his direct testimony, Mr. Reiker contends that the studies I provided in response to their data request cannot be compared to the Staff approach because Staff uses intermediate-term Treasury rates (not T-bills) and *Value Line* adjusted betas (that are closer to the average beta of 1.0 than are the statistical estimates of "raw" betas). *Value Line* adjusts statistical estimates of betas to be closer to the market average beta of 1.0 to provide more accurate forecasts of betas in the future. The original tests of CAPM were made with portfolios of betas that were not adjusted. Mr. Reiker says I have not shown that the *Value Line* adjusted betas together with the use intermediate-term Treasuries does not offset the bias reported in the CAPM tests. I have three responses to him.

First, the numbers below show the bias remains. With (1) forecasted values for the intermediate-term Treasury rates, (2) an assumption that the results of the Fama and MacBeth tests of CAPM provide a reasonable basis to determine the current additional return required by the zero-beta asset and (3) assuming – as Staff assumes – that an unadjusted *Value Line* beta (of .358) is comparable to the portfolio betas used in the CAPM tests, Mr. Reiker's CAPM approaches produces an average equity cost that is biased downward. Mr. Reiker presents two approaches and takes an average of those estimates:

First method (long-term average market risk premium):

Mr. Reiker's approach:	4.55%	+	.59	x	7.4%	= 8.9%
Zero beta approach:	9.31%	+	.358	x	2.6%	= 10.3%

Second method (current market risk premium):

Mr. Reiker's approach:	4.55%	+	.59	x	13.4%	= 12.4%
Zero beta approach:	9.31%	+	.358	x	8.6%	= 12.4%

Average of two equity cost estimates made with CAPM:

Mr. Reiker's approach:	(8.9% + 12.4%)/2	=	10.65%
Zero-beta approach:	(10.3% + 12.4%)/2	=	11.35%

Based on these calculations, Mr. Reiker's approach understates the cost of equity indicated by the zero-beta approach by 70 basis points (11.35% – 10.65%).

Second, Fischer Black (1993, page 11) revisited the CAPM tests he made in 1972 in Black Jensen and Scholes ("BJS") and chose to use the same methods used by BJS in their original study. He found the zero-beta version of the CAPM should be adopted. Black certainly knew about the method *Value Line* and others used to adjust betas but did not say that making such adjustments would eliminate the need to use the zero-beta version of the CAPM.

Third, statistical estimates of betas for small utilities (such as water utilities) are expected to be biased downward when weekly returns are used to make the beta estimates. *Value Line* uses weekly returns to make beta estimates. Mr. Reiker's CAPM approach for water utilities does not adjust for this expected negative bias in beta estimates. I discussed this issue in my direct testimony at page 46.

C. Other observations about implementation of the CAPM

Q. DO YOU HAVE ANY OTHER OBSERVATIONS ABOUT CAPM?

A. Yes. There are problems deciding how to implement the model, problems with making estimates of betas and market risk premiums, and problems with deciding what value to adopt for the risk free (zero-beta) asset. Based on my experience,

most regulatory jurisdictions do not give CAPM much weight when determining equity costs. One of the few regulatory commissions that gave CAPM any weight was the Oregon PUC. Recently, however, the Oregon PUC Staff abandoned presenting equity cost estimates based on the CAPM altogether.

The preferred method to implement the CAPM is to estimate the equity costs with the risk premium models I presented in my direct testimony, as updated herein. With that approach, the estimated company risk premium provides a direct estimate of the risk premium relevant for a utility. It implicitly includes the term (beta times the $[E(R_M) - R_Z]$) and any other compensation required by investors. With this approach, there is no need to estimate betas or market risk premiums, and there is no reason to determine if "beta risk" is the only risk of relevance to investors holding shares of water utilities. It is a simpler and less subjective approach.

Q. HAVE EITHER MR. REIKER OR MR. RIGSBY PRESENTED ANY EVIDENCE THAT THE BETA FOR ARIZONA-AMERICAN IS THE SAME AS THE AVERAGE BETA FOR THEIR SAMPLES OF WATER UTILITIES?

A. No, they have not. Arizona-American is not publicly traded and thus does not have a beta estimated with market data.

Q. YOU MENTIONED PROFESSOR SHARPE WHO WAS ONE OF THE SCHOLARS WHO ORIGINALLY DEVELOPED THE CAPM. WHAT HAS HE HAD TO SAY ABOUT THE EMPIRICAL RESEARCH THAT INDICATES THE ZERO-BETA VERSION OF CAPM PROVIDES A BETTER EXPLANATION OF STOCK PRICES?

A. Professor Sharpe has agreed with those findings and has included them in his text *Investments*. Sharpe reports in both his original textbook (e.g., Sharpe,

Investments, 176 (3rd ed., 1985)), and in a recent update of that textbook (Sharpe, Alexander and Bailey, *Investments*, 246 (6th ed., 1999)) that major tests of the model have found that the expected return on the risk-free asset is higher than what the original CAPM predicted. For example, Sharpe concluded that:

> Many organizations that estimate the SML generally find that it conforms more to the zero-beta CAPM than to the original CAPM.

Investments, 247 (6th ed. 1999).

Q. IF INVESTORS EXPECT RELATIVELY LOW INFLATION AND LOW INTEREST RATES, WHAT IS THE IMPACT ON THE MARKET RISK PREMIUM?

A. The market risk premium is expected to increase. This conclusion is consistent with Gordon and Halpern's theory and empirical studies that I discussed in my direct testimony. To be conservative, I have not adjusted upward Mr. Reiker's or Mr. Rigsby's average market risk premium estimates to reflect such an expected increase.

Q. WHY DID YOU USE FORECASTED TREASURY RATES IN YOUR RESTATEMENT?

A. In presenting updates of risk premium approaches, I explained why forecasted interest rates, not current 2003 rates, are appropriate to determine Arizona-American equity costs when Arizona-American cannot reasonably expect new rates to be in place before next year. The equity cost of relevance in this case is Arizona-American's cost of equity when the new rates are approved and applicable to utility service. *Blue Chip* conducts surveys of economists and reports their long-term forecasts every six months. Based on the most recent *Blue Chip* consensus forecast, long-term Treasury rates are expected to average 5.6% during the next two years and intermediate-term Treasury rates are expected to average 4.55%.

V. RESTATEMENTS OF RUCO AND ACC STAFF DCF EQUITY COST ESTIMATES

A. Restatements of Mr. Reiker's DCF approaches

Q. HAVE YOU RESTATED MR. REIKER'S DCF EQUITY COST ESTIMATES?

A. Yes. Rebuttal Tables 8 and 9 (Tab B) provide the restatement of Mr. Reiker's multi-stage DCF equity cost estimates and Rebuttal Tables 10 and 11 (also at Tab B) provide a summary of my restatements of all of his equity cost estimates for water and gas utilities.

1. The constant growth DCF model requires a realistic long-term average growth rate

Q. PLEASE BEGIN WITH YOUR COMMENTS ABOUT MR. REIKER'S CONSTANT GROWTH DCF ANALYSES. FOR PURPOSES OF YOUR RESTATEMENT, HAVE YOU ADOPTED MR. REIKER'S DIVIDEND YIELDS BASED ON SPOT PRICES?

A. Yes. I do not believe spot prices should be adopted to compute dividend yields, but, for purposes of my restatement of his DCF equity cost estimates, I have adopted Mr. Reiker's numbers.

Q. DO YOU HAVE ANY CONCERNS WITH THE GROWTH RATES HE ADOPTS FOR HIS CONSTANT GROWTH DCF ESTIMATES?

A. Yes. Rebuttal Table 5 (Tab B) shows that in the period 1992-1995, analysts' forecasts of growth for water utilities were comparable to past growth in DPS, EPS, and sustainable growth. In effect, analysts concluded future growth would be much as it was in the past. But in the more recent period 2002-2003, that is no longer the case. Now analysts expect more rapid growth in the future than in the past.

When an industry is in transition and companies within that industry are in the process of attempting to increase their financial strength, as is the case with the water utility industry, the absolute worst indicator of future growth to use with the constant growth DCF model is past DPS growth or near-term forecasts of increases in DPS. In fact, that evidence combined with evidence that EPS growth has been and is expected to be more rapid than DPS growth provides investors a basis to expect higher growth in the future. Many water and natural gas utilities have chosen to increase dividends more slowly than earnings are growing. EPS growth is also expected to grow much faster in the future than DPS. Mr. Reiker reports that has been the case in Schedules JMR-3 and JMR-14. Such choices have been made by the utilities to increase financial strength and to get their finances in order for the future. In particular, water utilities have sought to increase their financial strength in an era of mergers, acquisitions and a future expected to require massive amounts of new capital to fund replacement of an aging infrastructure and construct new facilities required by the EPA, as discussed in *Value Line* in August 2003 (see Exhibit TZ-3). Such delays in DPS increases improve the prospects for long-term dividend growth as the utilities increase their retention ratios and set the stage for higher sustainable growth.

Mr. Reiker correctly reports that both the water utility sample and natural gas utility sample are expected to have EPS growth that will exceed DPS growth. For the water utility sample, EPS growth is expected to be 3 times faster than DPS growth. In the case of the gas utilities, EPS is expected to grow 6 times faster than DPS. See Schedules JMR-3 and JMR-14. As the utilities improve their earnings retention ratios (as EPS grows faster than DPS), investors would recognize that the utilities will be able to grow dividends much faster in the future than in the past. Investors look forward – not backward – and would realize the forecasts of slow

near-term growth of DPS and past slow growth in DPS are the result of actions taken by the utilities to prepare for the future and that such differential growth in EPS and DPS allows higher dividend growth in the future.

Q. DO YOU HAVE ANY EVIDENCE TO SUPPORT THAT CONCLUSION?

A. Yes. Rebuttal Table 6 (Tab B) shows that, in the last 5 years, average prices for water utility stocks have increased faster than EPS, DPS and book values. The more rapid growth in prices supports my conclusion that investors expect more rapid growth in the future than the past. Otherwise, they would not bid up the price of the stock.

Q. WHAT DOES THIS LEAD YOU TO CONCLUDE ABOUT THE USE OF DPS GROWTH AS A MEASURE OF GROWTH IN THE CONSTANT GROWTH DCF MODEL?

A. It leads me to conclude knowledgeable investors relying on the constant-growth DCF model would not use past DPS growth or forecasts of near-term DPS growth to determine growth. Thus, DPS growth should not be included in the average of estimated growth rates used to make equity cost estimates for water and gas utilities with the constant-growth DCF model.

Q. ARE THERE OTHER REASONS NOT TO INCLUDE PAST DPS GROWTH?

A. Yes. In a number of places in his testimony, Mr. Reiker acknowledges Professor Myron Gordon to be an authority on the DCF model. Dr. Gordon wrote an article with two other authors (Gordon, Gordon and Gould, "Choice Among Methods of Estimating Share Yield," *Journal of Portfolio Management* (Spring 1989)) ("GG&G") in which he found analysts' consensus forecasts of future EPS growth provided better estimates of DCF growth than did past BR growth, past DPS growth and past EPS growth. In reaching that conclusion, GG&G say:

> [T]he superior performance by [forecasts of earnings growth] should come as no surprise. All four estimates of growth rely upon past data, but in the case of [forecasted earnings growth] a larger body of past data is used, filtered through a group of security analysts who adjust for abnormalities that are not considered relevant for future growth. [GG&G, page 54.]

To the extent that the past is relevant to the future, it is already in analysts' forecasts.

Q. AT PAGE 45, MR. REIKER STATES HISTORICAL GROWTH RATES ARE RELEVANT FOR A DCF ANALYSIS. DO YOU HAVE ANY OBSERVATIONS ABOUT HIS POINT?

A. Yes. Mr. Reiker has failed to recognize Professor Gordon's point that historical growth would already have been taken into account by professional analysts when they make their forecasts. Thus, to the extent that the analysts have already taken historical growth into account in their own forecasts, Mr. Reiker's approach double-counts the past. Worse yet, with respect to past DPS growth, it gives weight to a slow growth rate that, when combined with more rapid EPS growth, actually provides a harbinger of future growth that is expected to be much faster. Analysts are expected to provide unbiased forecasts of the future and to have already taken the past into account. Also, as long as investors expect EPS to grow more rapidly than DPS, the earnings retention ratio and thus potential growth from internal sources will increase. In such a situation, investors would not view near-term DPS growth as an indicator of average constant growth over the life of the security.

Q. DO YOU HAVE ANY EVIDENCE THAT PAST DPS GROWTH AND NEAR-TERM FORECASTS OF DPS GROWTH PRODUCE BIASED ESTIMATES OF THE COST OF EQUITY?

A. Yes. Any "method" used to estimate the cost of equity should provide an equity cost estimate that exceeds the cost of Baa bonds by a reasonable margin. Rebuttal Table 7 (Tab B) compares authorized returns in Arizona to Baa rates to determine a minimum reasonable margin that is consistent with past decisions. In making this analysis, I assume – as I did in the analysis in Table 22 – that Baa rates eight months prior to the order date provide a reasonable proxy for the level of interest rates considered during the proceeding. Rebuttal Table 7 shows the ACC has found margins above Baa rates of between 215 basis points and 466 basis points to be reasonable in the past; thus a margin smaller than the smallest past margin is inconsistent with past determinations of the ACC. Applying an equity cost estimation method to determine the equity cost for any particular utility in a sample might lead to an equity cost that produces less than a 215 basis point margin above Baa debt, but if the method is a reasonable approach, the data for the whole sample should exceed a floor of 9.25% (the expected Baa rate in 2004 of 7.1% plus the smallest past margin of 2.15%).

Schedules JMR-8 and JMR-19 report sample average dividend yields for the water and gas utilities Mr. Reiker uses in his constant growth DCF model of 3.47% and 4.97%, respectively. Combining those dividend yields with past and forecasted DPS growth rates from Schedules JMR-3 and JMR-14 produces equity cost estimates that don't make any sense. They are as follows:

<u>Water Utilities</u>:					
Past DPS growth	3.47%	+	2.5%	=	6.0%
Projected DPS growth	3.47%	+	2.9%	=	6.4%
<u>Gas Utilities</u>:					
Past DPS growth	4.97%	+	2.2%	=	7.2%
Projected DPS growth	4.97%	+	1.4%	=	6.4%

Three out of four of the implied equity costs are below the forecasted cost of Baa bonds for 2004 of 7.1% and none of those DCF estimates comes even close to the bottom of the range based on past decisions of 9.25%.

Q. HAVE YOU RESTATED MR. REIKER'S CONSTANT-GROWTH DCF EQUITY COST ESTIMATES WITHOUT INCLUDING PAST DPS GROWTH AND NEAR-TERM DPS GROWTH IN THE AVERAGE GROWTH RATES?

A. Yes. The restatements are as follows:

Equity cost water	= 3.47%	+	6.13%	=	9.6%
Equity cost gas	= 4.97%	+	5.95%	=	10.9%

Mr. Reiker reduces the estimate for the gas utilities by 100 basis points to 9.9%. The revised growth rates are the averages of 10-year EPS growth, projected EPS growth, 10-year intrinsic (sustainable) growth and projected intrinsic (sustainable) growth for the water and gas utilities reported by Mr. Reiker at Schedules JMR-5 and JMR-16, respectively. An equity cost for Arizona-American requires the addition of 50 basis points to the estimates for the water utilities sample; thus the indicated cost of equity range for Arizona-American based on his constant growth DCF model is 10.1% to 10.4% .

2. Mr. Reiker's multi-stage DCF model requires a second stage based on data for the utilities, not the economy as a whole

Q. PLEASE TURN TO MR. REIKER'S MULTI-STAGE DCF MODEL. WHAT DID HE DO?

A. Mr. Reiker implemented a two-stage DCF model in which he assumes investors would look at dividend growth for five years (stage-1 growth) and then adopt a growth rate for the economy as a whole for the terminal growth rate (stage-2 growth). He solves for the internal rate of return that makes the current price equal

to *Value Line*'s forecasts of dividends for the first year, dividends for the next four years based on *Value Line* forecasts of DPS growth and dividends after that first five year period that grow at the terminal growth rate.

Q. HAVE YOU RESTATED HIS MODEL ?

A. Yes. I have restated his analyses for both the water and the natural gas utilities with a three-stage growth model that incorporates Mr. Reiker's estimates of dividend growth, intrinsic growth and terminal growth. The results of my restatements are shown in Rebuttal Tables 8 and 9 (Tab B).

Knowledgeable investors expect the relatively slow near-term growth in DPS will be rewarded by higher future growth as the utilities gain financial strength from growing their earnings retention ratios. A multi-stage growth DCF model should incorporate this reasonable expectation of investors and not immediately go to a final stage growth rate that has nothing to do with the improved financial strength of the utilities. Also, the multi-stage DCF model should be internally consistent with the *Value Line* forecasts Mr. Reiker relies upon to forecast initial DPS growth. *Value Line* provides forecasts of intrinsic growth (Mr. Rigsby and I call this growth, "sustainable growth") for the period 2006 to 2008. Mr. Reiker presumes *Value Line* forecasts of DPS growth are relevant to investors for 2007 and 2008 when investors have better data available. Investors relying on *Value Line* forecasts would more logically assume *Value Line* forecasts of intrinsic growth for the 2006-2008 would be relevant for a number of years following 2006. Mr. Reiker's construction of the multi-stage growth model totally ignores those important forecasts of intrinsic growth. In my restatement, I have assumed Mr. Reiker's estimates of projected intrinsic growth from Schedules JMR-4 and JMR-15, for water and gas utilities, respectively, to determine second-stage growth for ten years following 2006 (2007-2016). My third stage growth

rate is the same as Mr. Reiker's second stage growth rate but starts in 2017 instead of year 6 as is assumed by Mr. Reiker.

Q. HOW DID YOU DETERMINE PROJECTED INTRINSIC GROWTH FOR CONNECTICUT WATER SERVICE, MIDDLESEX WATER AND SJW CORP?

A. I used the method Mr. Reiker used to estimate DPS growth for those utilities. He assumed the average of DPS growth rates for American States, California Water and Philadelphia Suburban provided a reasonable forecast of the DPS growth rate investors would expect for the remaining three. In making my multi-stage analysis, I adopted Mr. Reiker's approach to estimate initial DPS growth as well as subsequent intrinsic (sustainable) growth.

Q. PLEASE SUMMARIZE HOW YOUR MODEL DIFFERS FROM HIS.

A. I have added a second stage that recognizes both the *Value Line* forecasts of initial DPS growth and subsequent forecasts of intrinsic growth. My second stage growth is internally consistent with the *Value Line* forecasts of DPS and EPS from 2003 to 2006. In making my restatement, I have used Mr. Reiker's estimates of stock prices, next year's DPS estimates, initial DPS growth, intrinsic growth rates and the terminal growth rate of 6.5% he adopts. All of the data that I have used come from Mr. Reiker's own tables. When *Value Line* did not provide a forecast, I adopted Mr. Reiker's approach and assumed the average for the other water utilities was expected for the ones for which there was no forecast.

Q. WHAT ARE THE RESULTS OF YOUR RESTATEMENT OF HIS MULTI-STAGE DCF MODEL?

A. My results are shown in Rebuttal Tables 8 and 9 (Tab B). For Mr. Reiker's water utilities sample, the average equity cost estimate is 10.1%. I performed a comparable analysis for his natural gas utilities sample. For the natural gas

utilities, the average equity cost estimate is 11.1%. Mr. Reiker reduces the gas utilities equity cost estimate by 100 basis points, thus the proxy estimate of the less-leveraged water utilities benchmark cost of equity made with data for the gas utilities is also 10.1%. Adding the 50 basis point risk premium for financial risk to those restated equity cost estimates, indicates a cost of equity for Arizona-American of 10.6%.

Q. HAVE YOUR PREPARED A SUMMARY OF YOUR RESTATEMENTS OF MR. REIKER'S CAPM AND DCF EQUITY COST ESTIMATES?

A. Yes, I have. Rebuttal Tables 10 and 11 (Tab B) summarize my restatements of his estimates for water utilities and gas utilities estimates, respectively.

B. <u>Restatements of Mr. Rigsby's DCF approaches</u>

Q. PLEASE TURN TO YOUR COMMENTS ABOUT MR. RIGSBY'S DCF APPROACH. WHAT ARE YOUR PRIMARY CONCERNS WITH HIS ANALYSIS?

A. I address two concerns. First, Mr. Rigsby agrees with me that VS growth (external growth) and BR growth (internal growth) should be recognized when determining sustainable growth rate estimates. He has, however, adopted estimates of "S" (the stock financing rate) that will understate values of VS growth investors could reasonably expect from water utilities. Second, he has underestimated BR growth (growth from internal sources). As a result, he has understated growth and the DCF equity cost estimates. If an estimate of growth used in the DCF model is less than investors expect, the DCF equity cost will be too low.

Q. HOW DOES THE SAMPLE OF WATER UTILITIES HE USES TO DETERMINE DCF EQUITY COSTS COMPARE TO THE ONE YOU USED?

A. He uses the three large water utilities (out of four) I adopted for my analysis.

Q. FIRST, HOW DO MR. RIGSBY'S ESTIMATES OF BR GROWTH FOR HIS THREE UTILITIES COMPARE TO YOUR ESTIMATES OF BR GROWTH?

A. His estimates of BR growth are 20, 45 and 110 basis points lower than my updated estimates. His estimates are based on his review of data presented in Schedule WAR–6 and his judgment. The data in WAR-6 includes BR growth rates based on data reported by *Value Line* (in column C of WAR-6) that Mr. Rigsby has not adjusted to recognize the *Value Line* convention of reporting ROEs on an end-of-year basis. It is more appropriate to restate the growth rates to a mid-period or beginning-of-period basis. To be conservative, I adopt the mid-period basis to make my equity cost estimates.

Q. HOW DO MR. RIGSBY'S ESTIMATES OF BR GROWTH COMPARE TO MR. REIKER'S PROJECTED BR GROWTH RATES?

A. The estimates of projected BR growth reported by Mr. Reiker in Schedule JMR-4 are also higher than the BR growth rates Mr. Rigsby adopts. In one of my restatements of Mr. Rigsby's DCF results, I have adopted the estimates of projected VS and BR growth reported by Mr. Reiker on his Schedule JMR-4.

Q. TURN TO MR. RIGSBY'S ESTIMATE OF VS GROWTH. EXPLAIN YOUR CONCERNS WITH HIS ESTIMATES OF THE STOCK FINANCING RATE "S"?

A. The approach Mr. Rigsby has taken underestimates the stock-financing rate that rational investors would anticipate. Rebuttal Table 12 (Tab B) shows recent past growth in shares and forecasted future growth in the number of shares as well as Mr. Rigsby's estimates. Mr. Rigsby's average estimate of S of 1.0% is less than either the average of past or the average of future estimates of share growth Mr. Rigsby reports in Schedule WAR-6. For my first restatement of Mr. Rigsby's DCF

estimates, I have adopted his estimates of future growth in shares from Schedule WAR-6 column F to compute VS growth. This is the only change in the numbers Mr. Rigsby used to make the DCF estimate. With this change alone, his DCF equity cost estimate for the less-leveraged water utilities increases to 10.1%. See Panel A of Rebuttal Table 13 (also at Tab B). The revised estimates of S and VS growth are developed in Rebuttal Table 12 and the restatement of his DCF estimate with the revised value for VS growth is shown in Panel A of Rebuttal Table 13. Arizona-American is more leveraged and thus requires an equity return of no less than 10.6%.

Q. ARE THERE PROBLEMS WITH THE FORMULA HE USES TO COMPUTE V?

A. Yes. In estimating V, Mr. Rigsby substitutes his opinion for market data. He opines that ultimately, investors would expect stock prices for regulated utilities to drop to book value (Rigsby Direct, page 16). Thus, instead of using the market prices to determine V called for in a market model, Mr. Rigsby uses an average of the observed market-to-book ratio and a hypothetical market-to-book ratio of 1.0 to compute his estimate of V in VS growth. When the market-to-book ratio is 1.0, V is estimated to be zero and VS growth is also estimated to be zero. If one adopts the concept Mr. Rigsby espouses, it has the effect of assuming investors expect one-half as much VS growth as is revealed by market data.

Q. SHOULD MARKET PRICES MOVE TOWARD BOOK VALUES IF A UTILITY'S AUTHORIZED RETURN IS EQUAL TO THE COST OF EQUITY?

A. Not necessarily. I discuss this issue at pages 30 to 33 of my direct testimony and do not repeat that testimony again. Mr. Rigsby did not explain why he disagreed with the points I raised. Table 11 of my direct testimony shows the average

market-to-book ratios for water utilities followed by *C. A. Turner Utilities Reports* has been above 1.0 since at least 1991.

Q. DID YOU PREPARE A SECOND RESTATEMENT OF MR. RIGSBY'S DCF APPROACH?

A. Yes. For this restatement, I relied upon the forward-looking estimates of BR growth and VS growth Mr. Reiker presents in Schedule JMR-4 and Mr. Rigsby's estimates of dividend yields. Panel B of Rebuttal Table 13 shows that if sustainable growth is based on Mr. Reiker's data and not the flawed VS growth and lower BR growth that are based largely on Mr. Rigsby's unsupported opinion that stock prices will drop to book value, the cost of equity for less-leveraged water utilities is 10.9% and the indicated equity cost for Arizona-American is 11.4%.

Q. HAVE YOU PREPARED A TABLE THAT SUMMARIZES YOUR RESTATEMENTS OF MR. REIKER AND MR. RIGSBY'S EQUITY COST ESTIMATES?

A. Yes, those restatements are shown in Rebuttal Table 14 (Tab B). Based on those restatements of their estimates, Arizona-American's cost of equity falls in a range of 10.1% to 11.8% at this time.

Q. DOES THIS COMPLETE YOUR PREFILED REBUTTAL TESTIMONY?

A. Yes.

A

Arizona-American Water Company

Update Table 4

Beta Risk of Gas and Water Utilities Samples

	Updated [a/]	At the time Az-Am Filed Direct [b/]
Gas Distribution Utilities		
1 AGL Resources	0.75	0.60
2 Atmos Energy	0.65	0.55
3 Laclede Gas	0.65	0.55
4 NW Natural	0.60	0.60
5 Peoples Energy	0.75	0.70
6 Piedmont Natural	0.70	0.60
7 WGL Holdings	0.65	0.60
Average	0.68	0.60
Water Utilities		
1 American States	0.65	0.65
2 California Water	0.60	0.60
3 Philadelphia Suburban	0.70	0.60
4 SJW Corp	0.50	0.55
Average	0.61	0.60
Difference in average betas	0.066	0.00
Market Risk Premium [c/]	7.0%	7.0%
Indicated difference in cost of equity (basis points)	46	0

Sources:

_a/ *Value Line* Summary & Index, September 12, 2003.

_b/ Table 4 of Zepp Direct Testimony.

_c/ Ibbotson Associates, SBBI Year Book, Table 9-1.

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Arizona-American Water Company

Update Table 8

Average Dividend Yields for Water Utilities Sample

	D_0/P_0	D_0 [a/]	3-Month High Stock Price_b/	3-Month Low Stock Price_b/
1 American States	3.39%	$0.88	$28.95	$23.50
2 California Water	4.01%	$1.12	$31.40	$25.20
3 Philadelphia Suburban	2.31%	$0.55	$25.09	$22.85
4 SJW Corp	3.37%	$2.84	$87.00	$81.50
Average	3.27%			

Notes and Sources:

_a/ Dividends paid during last 12 months (as of August 31, 2003)

_b/ Prices during the last 3 months as of August 31, 2002.

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Arizona-American Water Company

Update Table 9

Estimates of Sustainable Growth for the Water Utilities Sample

	Retention Ratios Derived from Value Line Forecasts [a,e/]	Forecasted ROE [b,e/]	Forecast of BR [c/] Growth	VS Growth [d/]	Average Sustainable Growth
1 American States	0.47	10.0%	4.8%	1.0%	5.8%
2 California Water	0.39	10.5%	4.2%	2.1%	6.4%
3 Philadelphia Suburban	0.52	15.0%	8.1%	3.3%	11.4%
4 SJW Corp [e/]	0.48	10.6%	5.3%	0.0%	5.3%
Average of column	0.47	11.5%	5.6%	1.6%	7.2%

Notes and Sources:

_a/ Based on Value Line forecasts of DPS and EPS for the period 2006-2008 published at August 1, 2003 or past retention ratios.

_b/ Value Line forecast of ROE if available, otherwise past average earned ROE.

_c/ BR growth adjusted for year-end ROE forecast by Value Line.

_d/ Estimated VS growth derived in Update Table 10.

_e/ Based on historical information for 1996-2002 reported by Value Line.

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Arizona-American Water Company

Update Table 10

Estimate of Expected VS Growth for Water Utilities Sample

		Stock Financing Rate (S) [a/] (a)	Market to Book Ratio [b/] (b)	V (c)	VS growth (d)
1	American States	2.19%	1.85	0.46	1.01%
2	California Water	4.17%	2.04	0.51	2.12%
3	Philadelphia Suburban	4.97%	3.03	0.67	3.33%
4	SJW Corp	0.00%	1.62	0.38	0.00%
	Average of Column		2.14	0.51	1.61%

Notes and Sources:

_a/ From Value Line data reported August 1, 2002.

_b/ As reported by C. A. Turner in September 2003.

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Arizona-American Water Company

Update Table 12

Analysts' Forecasts of Future Earnings Growth for Water Utilities Sample

	First Call [a/]	Value Line [b/]	Average
1 American States	3.0%	6.0%	4.5%
2 California Water	3.0%	9.0%	9.0%
3 Philadelphia Suburban	10.0%	10.0%	10.0%
4 SJW Corp	_c/	_d/	
Averages:	5.3%	8.3%	6.8%

Notes and Sources:

_a/ As reported by Thompson/First Call provided by Yahoo!Finance, Sept 11, 2003.

_b/ Value Line forecasts as of August 1, 2003.

_c/ No forecast reported by either Tompson/First Call or Multex on September 11, 2003.

_d/ *Value Line* does not provide forecasts for SJW Corp.

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Arizona-American Water Company

Update Table 13

DCF Equity Cost Ranges Estimated for Water Utilities Sample and Arizona-American Water

	D_0/P_0	D_1/P_0 [a/]	Growth [b/]	Water Utilities Sample Equity Cost	Az-Amer Water Equity Cost [c/]
3-Month Dividend Yield	3.27%	3.5%	7.0%	10.5%	11.0%

Notes and Sources:

_a/ Based on $D_1 = D_0 \times (1 + g)$.

_b/ Average of estimated sustainable growth and range of growth predicted by analysts. See Update Tables 9 and 12.

_c/ Water utilities sample equity cost plus 50 basis points estimated by Mr. Reiker

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Arizona-American Water Company

Update Table 14

Average Dividend Yields for Gas Utilities Sample

	D_0/P_0	D_0 [a/]	3-Month High Stock Price [b/]	3-Month Low Stock Price [b/]
1 AGL Resources	4.07%	$1.09	$28.49	$25.28
2 Atmos Energy	4.94%	$1.20	$25.50	$23.00
3 Laclede Gas	5.03%	$1.34	$28.70	$24.85
4 NW Natural	4.50%	$1.26	$29.01	$27.02
5 Peoples Energy	4.98%	$2.10	$45.25	$39.53
6 Piedmont Natural	4.15%	$1.63	$41.50	$37.23
7 WGL Holdings	4.74%	$1.27	$28.79	$25.21
Average	4.63%			

Notes and Sources:

_a/ Dividends paid during last 12 months (as of August 31, 2003)

_b/ Prices during the last 3 months as of August 31, 2002.

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Arizona-American Water Company

Update Table 15

Forecasts of Sustainable Growth for Gas Utilities Sample

	Retention Ratios Derived from Value Line Forecasts[a/]	Forecasted ROE	Forecast of BR Growth[b/]	VS Growth[c/]	Average Sustainable Growth
1 AGL Resources	0.50	11.5%	5.9%	1.0%	6.9%
2 Atmos Energy	0.40	14.0%	5.8%	2.3%	8.1%
3 Laclede Gas	0.28	10.5%	3.0%	0.2%	3.2%
4 NW Natural	0.43	10.0%	4.4%	0.6%	5.0%
5 Peoples Energy	0.39	11.5%	4.6%	0.0%	4.6%
6 Piedmont Natural	0.38	13.0%	5.0%	0.6%	5.6%
7 WGL Holdings	0.45	11.5%	5.3%	0.2%	5.5%
Average of column	0.40	11.7%	4.9%	0.7%	5.6%

Notes and Sources:

_a/ Value Line forecasts of DPS and EPS growth and ROE as of Sept. 19, 2003.

_b/ BR growth adjusted for year-end ROE forecast by Value Line.

_c/ See Update Table 16.

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Arizona-American Water Company

Update Table 16

Estimate of Expected VS Growth for Gas Utilities Sample

	Stock Financing Rate (S)[a/] (a)	Market to Book Ratio[b/] (b)	V (c)	VS growth (d)
1 AGL Resources	1.86%	2.08	0.52	0.96%
2 Atmos Energy	8.93%	1.35	0.26	2.32%
3 Laclede Gas	0.46%	1.70	0.41	0.19%
4 NW Natural	1.84%	1.47	0.32	0.59%
5 Peoples Energy	0.00%	1.64	0.39	0.00%
6 Piedmont Natural	1.27%	1.92	0.48	0.61%
7 WGL Holdings	0.59%	1.51	0.34	0.20%
Average of Column		1.67	0.39	0.69%

Notes and Sources:

_a/ From Value Line data reported Sept. 19, 2003.

_b/ As reported by C. A. Turner in September 2003.

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Arizona-American Water Company

Update Table 17

Analysts' Forecasts of Future Earnings Growth for Gas Utilities Sample

	First Call [a/]	Value Line [b/]	Average
1 AGL Resources	5.5%	8.0%	6.8%
2 Atmos Energy	6.0%	9.0%	7.5%
3 Laclede Gas	4.0%	5.5%	4.8%
4 NW Natural	5.0%	5.0%	5.0%
5 Peoples Energy	5.0%	4.0%	4.5%
6 Piedmont Natural	5.0%	7.5%	6.3%
7 WGL Holdings	4.0%	7.0%	5.5%
Averages	4.9%	6.6%	5.8%

Notes and Sources:

_a/ Thompson/First Call average forecasts reported on Internet on September 11, 2003.

_b/ Value Line forecasts as of September 19, 2003.

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Arizona-American Water Company

Update Table 18

DCF Equity Cost Ranges for Water Utilities Sample and Arizona-American Based on Data for Gas Utilities Sample

	D_0/P_0	D_1/P_0 [a/]	Growth [b/]	Gas Utilities Sample Equity Cost	Benchmark Water Utilities Sample Equity Cost [c/]	Az-Am Water Equity Cost [d/]
3-month Dividend Yield	4.6%	4.9%	5.7%	10.5%	10.0%	10.5%

Notes and Sources:

_a/ Based on $D_1 = D_0 \times (1 + g)$.

_b/ Average of estimated sustainable growth and range of growth predicted by analysts. See Update Tables 15 and 17.

_c/ Assumes equity cost is 50 basis points lower.

_d/ Water utilities sample equity cost plus 50 basis points.

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Arizona-American Water Company

Update Table 21[a/]

Water Utility Risk Premiums Computed with Past Water Utilities ROEs and Forecasted Costs of Baa Bonds

Forecasts of Baa Corporate Rate [b/]	Estimated Risk Premium [a/]	Forecasted Equity Cost for Benchmark Water Utilities	Forecasted Equity Cost for Arizona-American Water
7.10%	3.91%	11.0%	11.5%
7.70%	3.53%	11.2%	11.7%

Notes and Sources:

a/ Formula from Table 21 of Direct Testimony

b/ Blue Chip Long Range Forecast, June 2003.

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Arizona-American Water Company

Update Table 22

Risk Premium Analysis[a/]
Regression Analysis of Risk Premiums Based on Authorized Returns for Natural Gas Utility Stocks and Baa Corporate Bond Rates

	Equity Cost Estimate		Predicted Premium[a/]		Forecasted Baa Corporate Bond Rate[b/]
Bottom	10.9%	=	3.83%	+	7.10%
Top	11.2%	=	3.53%	+	7.70%

Estimated Equity Cost for the Average Utility in Water Utilities Sample:

Bottom	=	10.4%
Top	=	10.7%

Estimated Range of Equity Costs for Arizona-American Water Company

Bottom	=	10.9%
Top	=	11.2%

Notes and Sources:

_a/ Source Table 22.

_b/ Blue Chip Long Range Forecast, June 2003.

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Arizona-American Water Company

Update Table 23

Risk Premium Analysis[a/]
Comparison of Total Returns on Moody's Natural Gas Stock Index and Baa Corporate Bond Rates

Average Risk Premium[a/] = 3.67%

Equity Cost Forecast	Forecast of Baa Bond Rates[b/]	Gas Utility Equity Cost	Benchmark Water Utilities Sample Equity Cost	Az-Am Water Equity Cost
Low	7.1%	10.8%	10.3%	10.8%
High	7.7%	11.4%	10.9%	11.4%

Notes and Sources:

a/ Data from Table 23.

b/ Range of forecasts for 2004-2005 compiled by Blue Chip, June 2003.

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Arizona-American Water Company

Update Table 24

Update of Summary Table: Estimated Cost of Equity Ranges for Water Utilities Sample and Arizona-American Water

	Estimated Ranges of Equity Costs for Benchmark Water Utilities			Estimated Range of Equity Costs for Arizona-American Water		
Discounted Cash Flow Estimates						
Based on Water Utilities	10.5%	to	10.5%	11.0%	to	11.0%
Based on Gas Utilities	10.0%	to	10.0%	10.5%	to	10.5%
Risk Premium Analyses Estimates						
Based on Water Utilities	11.0%	to	11.2%	11.5%	to	11.7%
Based on Gas Utilities Authorized ROEs	10.4%	to	10.7%	10.9%	to	11.2%
Based on Moody's Gas Utilities Index	10.3%	to	10.9%	10.8%	to	11.4%
Estimated Equity Cost Range for Arizona-American Water Company				10.5%	to	11.7%

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B

Arizona-American Water Company

Rebuttal Table 1

Authorized Returns, Realized Returns and Forecasted ROEs for Recent Periods

Year	Mr. Reiker's Sample of Water Utilities Authorized ROEs [a/]	Mr. Reiker's Sample of Water Utilities Actual ROEs [a/]	Value Line [b/] Forecasts of ROE 2 Years into the Future
1997	11.18%	11.82%	
1998	11.06%	10.90%	
1999	11.12%	10.59%	11.00%
2000	11.12%	9.75%	11.00%
2001	10.86%	10.27%	11.00%
2002	10.62%	10.58%	10.50%
2003	10.59% [c/]	10.35% [c/]	11.00%
Average	10.93%	10.61%	10.90%
RUCO/Staff Water Utilities Samples	9.1%/9.2%	9.1%/9.2%	9.1%/9.2%
Comparison of the average of RUCO and ACC Staff estimates to 2003 values	1.44%	1.20%	1.85%

Sources:

a/ *C. A. Turner Utility Reports*, year-end reports except for 2003.

b/ Various *Value Line,* reports. For 2003, the report dated August 1, 2003.

c/ C. A. Turner Utility Reports, September 2003

9/26/03

Arizona-American Water Company

Rebuttal Table 2

Differences in Current, Past and Forecasted Premiums of Baa Rates over 10 Year Treasury Rates

	Average Baa Rate	Average 10 Year Treasury Rate	Average Premium	Difference Between Premium in Current period and in 1982-1998 Period
Past Periods[a/]				
1982-1998	10.33	8.33	2.00	0.00
1999-2002	8.00	5.32	2.67	0.67
2001-2002	7.87	4.81	3.06	1.06
Forecasts[b/]				
2004	7.1	4.6	2.50	0.50
2005	7.7	5.3	2.40	0.40

Sources:
a/ Federal Reserve
b/ Blue Chip consensus forecasts, June 2003.

9/30/03

Arizona-American Water Company

Rebuttal Table 3

Regression Results[a/] and the Ability of Baa Rates and 10 Year Treasury Rates to Explain Equity Costs

Period	Regression Results Intercept	Slope	Number of Observations	R^2
Baa rates explaining equity costs				
1999 to 2002	0.062	0.614 (0.2258)[b/]	35	18.3%
1982 to 2002	0.074	0.492 (0.0098)[b/]	464	84.5%
10yr Treasury Rates explaining equity costs				
1999 to 2002	0.096	0.279 (0.1552)[b/]	35	8.9%
1982 to 2002	0.080	0.553 (0.0121)[b/]	464	82.0%

Notes and Sources:

a/ Equity cost data is updated data for sample adopted in Table 23. Interest rates reported by the Federal Reserve.

b/ Standard error of slope coefficients in parentheses. All slope estimates statistically different from zero at .05 level.

9/28/03

Arizona-American Water Company

Rebuttal Table 4

Detailed Data Supporting Risk Premium Analysis in Table 21

A. Authorized ROEs[a/]

	AWK	AWR	CWT	CTWS	MSEX	PSC	SJW	Average
1991	12.81	12.00	12.25	12.70	12.30	12.70	12.25	12.43
1992	12.16	11.75	12.25	12.70	12.30	12.00	11.75	12.13
1993	12.16	11.75	12.25	12.70	12.30	12.00	11.75	12.13
1994	11.58	10.10	11.00	12.70	11.50	12.00	11.75	11.52
1995	11.58	10.50	11.00	12.70	11.50	12.00	11.75	11.58
1996	11.58	10.40	10.30	12.70	11.50	12.00	10.20	11.24
1997	11.16	10.40	10.30	12.70	11.50	11.25	10.20	11.07
1998	11.21	10.40	10.30	12.70	12.05	11.05	10.20	11.13
1999	11.21	10.40	10.30	12.70	12.05	11.05	10.20	11.13
2000	11.02	10.00	10.48	12.70	11.15	10.65	10.20	10.89
Average								11.52

B. Return on Average Common Equity [b/]

	AWK	AWR	CWT	CTWS	MSEX	PSC	SJW	Average
1991	12.90	11.80	11.80	5.70	12.40	10.90	18.50	12.00
1992	11.20	10.50	11.80	4.80	11.00	10.60	13.70	10.51
1993	11.50	12.50	12.40	10.20	12.90	11.40	10.30	11.60
1994	10.70	10.00	12.30	10.80	12.20	9.50	9.50	10.71
1995	11.20	10.00	12.40	11.70	12.00	10.60	10.00	11.13
1996	9.60	12.40	12.10	11.80	10.60	15.50	9.20	11.60
1997	10.40	14.20	12.10	12.10	11.50	11.40	9.30	11.57
1998	10.60	10.90	12.10	12.40	9.70	11.20	9.50	10.91
1999	8.50	11.20	12.00	9.90	11.20	11.00	10.10	10.56
2000	9.60	10.10	12.30	12.40	7.50	7.40	9.40	9.81
Average								11.04
Difference between Authorized and Realized ROEs								0.48

Notes and Sources:

a/ As reported by *C. A. Turner Utility Reports.*

b/ As reported by the California PUC Staff. CPUC Staff reported the source was MSN Money Central 5/31/01.

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Arizona-American Water Company

Rebuttal Table 5

Comparison of Analysts' Forecasts of Future Growth With Estimates of Growth Based on Past Growth in DPS, EPS and Retained Earnings Made by CPUC Staff[a/]

	Application Number	Date	CPUC Staff Estimates of Growth Based on Past Data: Retained Earnings	CPUC Staff Estimates of Growth Based on Past Data: DPS and EPS Growth	Average of Analysts' Forecasts Of Growth	Are Forecasts Comparable to Past Growth
Cases from 1992 to 1995						
California-American Water	A.92-03-030	July 1992	3.6%	5.9%	4.1%	yes
San Gabriel Valley Water	A.92-09-032	April 1993	3.5%	6.0%	4.5%	yes
Park Water Company	A.94-03-038	June 1994	3.0%	4.5%	4.2%	yes
Valencia Water Company	A.94-04-033	Aug 1994	3.3%	4.5%	4.2%	yes
San Gabriel Valley Water	A.95-09-010	Dec 1995	3.6%	4.6%	4.0%	yes
California -American Water	A.95-02-016	May 1995	3.0%	4.6%	3.8%	yes
Cases from 2002 to 2003						
Valencia Water Company	A.02-05-013	Sept 2002	3.4%	2.9%	6.5%	no
California-American Water	A.02-09-030	March 2003	3.1%	2.4%	6.2%	no
San Gabriel Valley Water	A.02-11-044	July 2003	3.0%	3.3%	6.2%	no

Notes and Sources:

a/ All growth rates are growth rates based on data reported by the California PUC Staff.

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Arizona-American Water Company

Rebuttal Table 6

Growth in Prices, Book Values, EPS and DPS
1997 to 2002

	Average annual changes, 1997-2002				Five-Year Change in Stock Prices[a/]
	Price[a/]	Book Value[b/]	DPS[b/]	EPS[b/]	
American States Water	10.2%	4.6%	0.9%	6.2%	61%
California Water Service	-0.1%	0.2%	1.1%	-6.0%	-2%
Middlesex Water	12.4%	4.3%	2.8%	4.0%	74%
Philadelphia Suburban	15.4%	9.0%	6.2%	9.6%	91%
SJW Corporation	11.7%	3.7%	3.9%	1.1%	56%
Average for 5 Utilities	9.9%	4.4%	3.0%	3.0%	56%
Connecticut Water Service	13.9%	4.8%	1.1%	3.1%	88%

Sources:
a/ Prices as reported on the Internet.
b/ Annual Reports to Stockholders or *Value Line*.

9/26/03

Arizona-American Water Company

Rebuttal Table 7

Authorized ROE Margins Above Baa Rates in Recent Arizona Corporation Commission Cases

Date of Decision[a/]	Authorized ROE	Baa Rate During[b/] Proceeding	Margin
May-97	10.50%	8.35%	2.15%
May-97	11.00%	8.35%	2.65%
September-97	11.50%	8.09%	3.41%
July-98	11.30%	7.42%	3.88%
July-99	11.00%	7.34%	3.66%
July-99	12.00%	7.34%	4.66%
January-00	11.75%	7.72%	4.03%
June-00	11.50%	8.38%	3.12%
October-01	11.00%	7.87%	3.13%
December-01	10.25%	8.07%	2.18%
Average		7.89%	3.29%
Lowest margin			2.15%
Largest margin			4.66%

Notes and Sources:

a/ Decisions reported in Table 7 of Zepp Direct Testimony.

b/ Based on interest rates prevailing 8 months prior to date of order.

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Arizona-American Water Company

Rebuttal Table 8: Multi-Stage DCF Estimates
Sample Water Companies

Line No.	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]
				Stage 1 growth (2004-2006)		Stage 2 growth (2007-2016)		Stage 1 Initial growth[b/] (2004-2006)	Stage 2 Projected Intrinsic growth[c/] (next 10 years)	Stage 3 Terminal growth[d/] (future years)	Equity Cost Estimate (K)
1		Current Mkt. Price (P_o)[a/]	d_{2004}[a/]	d_{2005}	d_{2006}	d_{2007}	d_{2016}				
2											
3	American States Water	26.0	0.88	0.91	0.93	0.99	1.70	2.88%	6.20%	6.5%	9.6%
4	California Water	26.9	1.12	1.13	1.15	1.19	1.71	1.16%	4.10%	6.5%	9.7%
5	Connecticut Water Services	25.4	0.85	0.88	0.90	0.97	1.91	3.10%	7.80%	6.5%	10.0%
6	Middlesex Water	22.1	0.88	0.91	0.94	1.01	1.98	3.10%	7.80%	6.5%	10.6%
7	Philadelphia Suburban	23.2	0.58	0.61	0.64	0.73	2.18	5.27%	13.00%	6.5%	10.4%
8	SJW Corp.	85.5	2.95	3.04	3.14	3.38	6.65	3.10%	7.80%	6.5%	10.1%
13											
14										Average	10.1%

15 Sources:

16 a/ Schedule JMR-7.

17 b/ Schedule JMR-7.

18 c/ Schedule JMR-4. Relatively slow Stage 1 growth permits the higher intrinsic growth in Stage 2.

19 d/ Schedule JMR-7.

20

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Arizona-American Water Company

Rebuttal Table 9: Multi-Stage DCF Estimates
Sample Gas Utilities

Line No.	[A]	[B] Current Mkt. Price (P_o)[a/]	[C] Stage 1 growth (2004-2006) d_{2004}[a/]	[D] Stage 1 growth (2004-2006) d_{2005}	[E] Stage 1 growth (2004-2006) d_{2006}	[F] Stage 2 growth (2007-2016) d_{2007}	[G] Stage 2 growth (2007-2016) d_{2016}	[H] Stage 1 Initial growth[b/] (2004-2006)	[I] Stage 2 Projected Intrinsic growth[c/] (next 10 years)	[J] Stage 3 Terminal growth[d/] (future years)	[K] Equity Cost Estimate (K)
1	AGL Resources	25.39	1.12	1.12	1.12	1.20	2.15	0.00%	6.8%	6.5%	10.5%
2	Atmos Energy	23.06	1.21	1.24	1.28	1.37	2.70	2.66%	7.8%	6.5%	11.8%
3	Cascade Natural Gas	18.69	0.96	0.97	0.97	1.05	2.14	0.69%	8.2%	6.5%	11.7%
4	Laclede Group	24.20	1.34	1.35	1.36	1.41	1.98	0.74%	3.8%	6.5%	10.6%
5	Nicor Inc.	31.15	1.86	1.95	2.05	2.19	4.03	4.91%	7.0%	6.5%	12.5%
6	Northwest Natural Gas	26.20	1.27	1.29	1.30	1.39	2.42	1.29%	6.4%	6.5%	10.9%
7	Peoples Energy	39.85	2.12	2.15	2.17	2.28	3.60	1.22%	5.2%	6.5%	10.9%
8	Piedmont Natural Gas	37.35	1.66	1.72	1.77	1.91	3.81	3.37%	7.9%	6.5%	11.1%
9	Southwest Gas	20.55	0.82	0.82	0.82	0.88	1.59	0.00%	6.8%	6.5%	10.1%
10	WGL Holdings	26.45	1.28	1.29	1.31	1.39	2.50	1.02%	6.7%	6.5%	10.9%
										Average	11.1%

Sources:

a/ Schedule JMR-18.
b/ Schedule JMR-18.
c/ Schedule JMR-15. Relatively slow Stage 1 growth permits the higher intrinsic growth in Stage 2.
d/ Schedule JMR-18.

9/21/03

Arizona-American Water Company

Rebuttal Table 10

Revisions of Mr. Reiker's Final Cost of Equity Estimates
for the Sample Water Companies

Line No.	[A] Constant Growth DCF	[B]	[C] D_1/P_0		[D] g [a/]		[E] k
1	Constant Growth DCF Estimate		3.47%	+	6.13%	=	9.6%
2	Multi-Stage DCF Estimate					=	10.1%
3					Average		9.8%

	CAPM Approach:	R_F [b/]		β		MRP_{RF}		k
4	Historical Market Risk Premium	5.6%	+	0.59	x	7.0%	=	9.7%
5	Current Market Risk Premium	5.6%	+	0.59	x	12.3%	=	12.9%
6	Average of CAPM Estimates							11.3%

7	Average of DCF and CAPM Approaches	10.6%

Notes:

a/ Average of all of Mr. Reiker's DCF growth rates other than those based on past and forecasted dividends per share.

b/ Average of Blue Chip forecasts for long-term Treasury securities for 2004-2005.

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Arizona-American Water Company

Rebuttal Table 11

Revisions of Mr. Reiker's Final Cost of Equity Estimates
for the Sample Gas Utilities

Line No.	[A] Constant Growth DCF	[B]	[C]	[D]		[E]		[F]
			D_1/P_0	+	$g^{a/}$	=		k
1	Constant Growth DCF Estimate		4.97%	+	5.95%	=		10.9%
2	Multi-Stage DCF Estimate					=		11.1%
3					Average			11.0%
	CAPM Approach:	$R_F^{b/}$	+	β	x	MRP_{RF}	=	k
4	Historical Market Risk Premium	5.6%	+	0.69	x	7.0%	=	10.4%
5	Current Market Risk Premium	5.6%	+	0.69	x	12.3%	=	14.1%
6	Average of CAPM Estimates							12.3%
7	Average of DCF and CAPM Approaches for Gas Utilities							11.6%
8	Proxy for Benchmark Water Utilities							10.6%

Notes:

a/ Average of all of Mr. Reiker's DCF growth rates other than those based on past and forecasted dividends per share.

b/ Average of Blue Chip forecasts for long-term Treasury securities for 2004-2005.

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Arizona-American Water Company

Rebuttal Table 12

Analysis of Estimates of Mr. Rigsby's Estimates of Share Growth and Restatement of VS Growth

	Growth in Number of Shares		
	Past [a/]	Forecast [b/]	Mr. Rigsby [c/]
	(A)	(B)	(C)
1 American States	2.46%	2.05%	0.25%
2 California Water	3.76%	4.37%	1.00%
3 Philadelphia Suburban	10.91%	2.00%	1.75%
Average	5.71%	2.81%	1.00%

	Restatement of VS Growth		
	V [d/]	S	VS
1 American States	0.41	2.05%	0.84%
2 California Water	0.56	4.37%	2.45%
3 Philadelphia Suburban	1.10	2.00%	2.20%
Average			1.83%

Notes and Sources:

a/ For the period 1997 to 2002 (*Value Line* data).
b/ For the period 2002 to 2007 (Schedule WAR-6).
c/ Schedule WAR-5, Column A, page 2 of 2.
d/ Schedule WAR-5, Column B, page 2 of 2.

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Arizona-American Water Company

Rebuttal Table 13

Restatement of Mr. Rigsby's DCF Estimates

A. Revise Mr. Rigsby's Estimate of the stock financing rate[a/]

	Internal Growth (BR)	External Growth (VS)	Dividend Growth (g)	Dividend Yield	DCF Cost of Equity Capital
1 American States	4.60%	0.84%	5.44%	3.25%	8.69%
2 California Water	3.75%	2.45%	6.20%	3.83%	10.03%
3 Philadelphia Suburban	7.00%	2.20%	9.20%	2.33%	11.53%
Average					**10.1%**

B. Adopt Mr. Reiker's estimates of BR and VS growth[b/]

	Internal Growth[c/] (BR)	External Growth[b/] (VS)	Dividend Growth[b/] (g)	Mr. Rigsby's Dividend Yield	DCF Cost of Equity Capital
American States	5.00%	1.20%	6.20%	3.25%	9.45%
California Water	4.00%	0.10%	4.10%	3.83%	7.93%
Philadelphia Suburban	8.00%	5.00%	13.00%	2.33%	15.33%
Average					**10.9%**

Notes and Sources:

a/ Value of "S" is revised in Rebuttal Table 12.

b/ Forecasts of BR and VS growth as reported in Schedule JMR-4.

9/28/03

Arizona-American Water Company

Rebuttal Table 14

Summary of Restatements of Estimated Costs of Equity Presented by Mr. Reiker and Mr. Rigsby for Less-Leveraged Water Utilities Samples and Arizona-American

	Estimated Benchmark Ranges of Equity Costs for Water Utilities Sample			Estimated Range of Equity Costs for Arizona-American		
Discounted Cash Flow Estimates						
Mr. Reiker (gas and water)	9.6%	to	10.1%	10.1%	to	10.6%
Mr. Rigsby	10.1%	to	10.9%	10.6%	to	11.4%
Estimates based on the CAPM						
Mr. Reiker (gas and water)	11.3%	to	11.3%	11.8%	to	11.8%
Mr. Rigsby	9.8%	to	9.8%	10.3%	to	10.3%
Estimated Equity Cost Range for Arizona-American Water				**10.1%**	**to**	**11.8%**

9/30/03

C

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In the Matter of an Investigation	)
Into Policy Issues and Procedures	)
Associated with Recovery of	)
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number out; and then let's say you put in the number 10 percent, and you get a second number out: Is the adjustment in basis points the same for the 4 percent as the 10 percent?

A. No.

Q. And how do the -- how does the adjustment differ? For example, I guess I'm trying to conclude, is the adjustMENT greater for higher interest rates than for lower interest rates?

A. The adjustment in basis points --

Q. Yes, exactly.

A. -- would be greater.

Q. For higher interest rates?

A. Yes, would be.

Q. Okay. On page 18 on line 2, you indicate your conclusion that, if investors could have information only on EPS -- and that stands for earnings per share growth, I assume -- or only on DPS -- which I assume is dividends per share growth -- investors would prefer the information about EPS growth.

Are you saying that investors give equal weight to earnings per share historical data in forecasts, and dividends per share of historical

data in forecasts, in forming their expectations of dividend growth? Or are you saying that, if you had both of those sets of information, investors would prefer earnings per share?

MS. ACKERMAN: That was a long question. Do you want it broken up?

THE WITNESS: Well, it was a question that didn't refer to the testimony that's stated here. I'm -- I really have no change in the testimony. If you have a different question than what's in the testimony, that's another matter, but I think the testimony is clear.

BY MR. THORNTON:

Q. Okay. Well, I guess I'm not understanding it. If you have earnings per share growth information and dividends per share growth information, which sets of information do investors prefer, according to you?

A. According to me, investors would look at both, but this particular testimony here refers to your testimony, in which you didn't look at earnings per share growth. And my point is, if you're only going to look at one -- in my view, if you were only going to look at one, investors would look at earnings per share growth. That's

the testimony, and I still stand by that testimony, but as I've stated, I would look at both.

Q. And just to clarify and give a context to the question, what is the purpose of looking at the information?

MR. GRAHAM: And which information are we talking about, the earnings per share growth?

MR. THORNTON: The earnings per share growth or dividends per share growth.

Q. I mean, why do we look at it?

A. To ultimately forecast dividend growth in the long term.

Q. Or could you also conclude to -- ultimately to estimate investors' forecasts of dividend growth?

A. Yes.

Q. Okay. On page 17, the page just before, on line 18 you indicate that available evidence indicates that they -- meaning the investors -- would look at earnings per share growth. And what is that evidence?

A. It's stated in the next two sentences.

Q. So --

A. That investors are willing to pay for

publications such as the S & P Earnings Guide.

Q. Okay. Page 28, on page 28, what is your evidence -- and this is, excuse me, the Q and A beginning on line 10. What is your evidence that including global market returns would increase rather than decrease overall market returns? By "overall market returns" I mean we're technically referring to the efficient portfolio.

A. I would have to get that for you. My recollection -- I've provided that in data responses in the past. It's chapter 10 of a textbook. I'm -- to my recollection Elton and Gruber wrote it, but I would have to check on that, but it is a textbook.

MR. THORNTON: So how do we arrange that?

MR. GRAHAM: Well, let me do some follow-up here. How long would it take you to find out which textbook that is?

THE WITNESS: I'd have to go back through cases, and they are probably four or five years old. But I should -- hopefully I still have it in my work papers. It may have been submitted in a prior Northwest Natural case.

MR. GRAHAM: Do you think that you could

SEPTEMBER 2003

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AGL Resources Inc. (NYSE-ATG)	6/03	1.99	1.12	13.23	27.52	67.7	56	4.1	208	8.5	13.8
Atmos Energy Corporation (NYSE-ATO)	6/03	1.83	1.20	17.99	24.31	46.0	66	4.9	135	6.7	13.3
Cascade Natural Gas Corporation (NYSE-CGC)	6/03	0.81	0.96	10.70	18.48	11.1	119	5.2	173	9.0	22.8
Chesapeake Utilities Corporation (NYSE-CPK)	6/03	1.41	1.10	12.98	23.95	5.6	78	4.6	185	8.5	17.0
Delta Natural Gas Company (NDQ-DGAS)	3/03	1.60	1.18	14.29	23.12	2.6	74	5.1	162	8.3	14.5
El Paso Corporation (NYSE-EP)	6/03	-2.94	0.16	13.41	7.08	595.0	NM	2.3	53	1.2	NM
Energen Corporation (NYSE-EGN)	6/03	2.76	0.72	18.93	35.23	34.5	26	2.0	186	3.8	12.8
Energy West Incorporated (NDQ-EWST)	3/03	1.44	0.00	5.89	6.33	2.6	0	0.0	107	NM	4.4
EnergySouth, Inc. (NDQ-ENSI)	6/03	2.11	1.14	16.63	33.31	5.1	54	3.4	200	6.9	15.8
Equitable Resources, Inc. (NYSE-EQT)	6/03	2.61	0.80	13.51	39.52	62.3	31	2.0	293	5.9	15.1
KeySpan Corp. (NYSE-KSE)	6/03	2.53	1.78	22.72	33.69	157.9	70	5.3	148	7.8	13.3
Kinder Morgan, Inc. (NYSE-KMI)	6/03	2.87	1.60	20.83	52.94	122.0	56	3.0	254	7.7	18.4
Laclede Group, Inc. (NYSE-LG)	6/03	1.77	1.34	16.20	27.59	19.0	76	4.9	170	8.3	15.6
National Fuel Gas Company (NYSE-NFG)	6/03	1.66	1.08	14.18	23.05	80.9	65	4.7	163	7.6	13.9
New Jersey Resources Corp. (NYSE-NJR)	6/03	2.42	1.24	16.03	36.10	27.1	51	3.4	225	7.7	14.9
NICOR Inc. (NYSE-GAS)	6/03	3.25	1.86	17.23	33.64	44.0	57	5.5	195	10.8	10.4
Northwest Natural Gas Co. (NYSE-NWN)	6/03	1.61	1.26	19.48	28.60	25.7	78	4.4	147	6.5	17.8
NUI Corporation (NYSE-NUI)	6/03	0.87	0.98	18.79	15.85	16.1	113	6.2	84	5.2	18.2
ONEOK, Inc. (NYSE-OKE)	6/03	1.95	0.68	12.76	20.02	96.7	35	3.4	157	5.3	10.3
Peoples Energy Corporation (NYSE-PGL)	6/03	2.91	2.12	24.42	40.10	35.9	73	5.3	164	8.7	13.8
Piedmont Natural Gas Co., Inc. (NYSE-PNY)	4/03	2.04	1.66	19.94	38.27	33.3	81	4.3	192	8.3	18.8
Questar Corporation (NYSE-STR)	6/03	2.18	0.74	14.31	32.14	82.7	34	2.3	225	5.2	14.7
RGC Resources, Inc. (NDQ-RGCO)	6/03	1.80	1.14	17.45	22.81	2.0	63	5.0	131	6.5	12.7
SEMCO Energy, Inc. (NYSE-SEN)	6/03	-0.65	0.30	5.10	4.11	19.1	NM	7.3	81	5.9	NM
South Jersey Industries, Inc. (NYSE-SJI)	6/03	2.73	1.54	21.05	37.85	12.3	56	4.1	180	7.3	13.9
Southern Union Company (NYSE-SUG)	6/03	0.84	0.00	15.39	16.29	59.8	0	0.0	106	NM	19.4
Southwest Gas Corporation (NYSE-SWX)	6/03	1.28	0.82	18.16	21.98	33.8	64	3.7	121	4.5	17.2
Southwestern Energy Company (NYSE-SWN)	6/03	0.98	0.00	8.35	17.04	35.6	0	0.0	204	NM	17.4
UGI Corporation (NYSE-UGI)	6/03	1.73	1.14	13.80	30.05	42.5	66	3.8	218	8.3	17.4
WGL Holdings, Inc. (NYSE-WGL)	6/03	2.20	1.28	17.51	26.45	48.6	58	4.8	151	7.3	12.0
Williams Companies, Inc. (NYSE-WMB)	6/03	-1.97	0.04	7.76	8.28	520.9	NM	0.5	107	0.5	NM
AVERAGE							57	3.7	165	6.7	15.0

NATURAL GAS DISTRIBUTION & INTEGRATED NAT. GAS COMPANIES

COMPANY	OPER REV $ MILL (1)	% GAS REV	NET PLANT $ MILL	NET PLANT PER $ REV (1)	S&P BOND RATING	MOODY'S BOND RATING	COMMON EQUITY RATIO (3)	% RETURN ON BOOK VALUE: COMMON EQUITY (4)	% RETURN ON BOOK VALUE: TOTAL CAPITAL	REGULATION: ALLOWED ROE	REGULATION: ORDER DATE
AGL Resources Inc. (NYSE-ATG)	978.4	95	2,224.8	2.27	A-	A3	43	14.6	9.5	10.99	-
Atmos Energy Corporation (NYSE-ATO)	1,487.9	99	1,494.4	1.00	A-	A3	49	9.4	8.5	12.10	-
Cascade Natural Gas Corporation (NYSE-CGC)	302.6	100	305.2	1.01	BBB+	Baa1	42	7.4	7.6	11.75	-
Chesapeake Utilities Corporation (NYSE-CPK)	166.2	63	166.7	1.00	NR	NR	49	11.4	9.1	-	-
Delta Natural Gas Company (NDQ-DGAS)	64.8	73	109.3	1.69	NR	NR	34	11.6	8.2	-	12/99
El Paso Corporation (NYSE-EP)	12,457.0	21	22,479.0	1.80	BB-	B1	26	NM	NM		
Energen Corporation (NYSE-EGN)	788.4	61	427.7	0.54	A-	A1	54	15.6	11.5	13.40	06/02
Energy West Incorporated (NDQ-EWST)	88.5	33	39.2	0.44	NR	NR	40	NM	6.3	12.63	-
EnergySouth, Inc. (NDQ-ENSI)	96.5	94	192.0	1.99	NR	NR	45	13.4	10.1	13.60	10/01
Equitable Resources, Inc. (NYSE-EQT)	1,206.8	32	1,687.9	1.40	A	A2	53	20.2	14.2	11.00	-
KeySpan Corp. (NYSE-KSE)	6,807.8	59	7,533.4	1.11	A+	A2	37	11.8	7.5	11.00	-
Kinder Morgan, Inc. (NYSE-KMI)	1,080.9	31	6,002.0	5.55	BBB	Baa2	36	14.7	7.4	-	-
Laclede Group, Inc. (NYSE-LG)	1,014.8	74	612.0	0.60	A	A3	42	11.1	8.4	-	10/02
National Fuel Gas Company (NYSE-NFG)	1,982.9	57	3,108.6	1.57	BBB+	A3	40	12.1	8.6	11.50	-
New Jersey Resources Corp. (NYSE-NJR)	2,658.0	30	768.8	0.29	A+	A2	53	16.5	9.9	11.50	01/94
NICOR Inc. (NYSE-GAS)	2,578.6	88	1,802.2	0.70	AA	Aa3	51	19.4	12.9	-	11/99
Northwest Natural Gas Co. (NYSE-NWN)	585.0	98	1,026.4	1.75	A	A2	50	8.5	7.9	10.25	-
NUI Corporation (NYSE-NUI)	428.6	86	647.6	1.51	BBB	Ba1	38	7.0	4.6	10.75	-
ONEOK, Inc. (NYSE-OKE)	2,573.2	57	1,234.6	0.48	A-	Baa1	38	12.2	9.2	-	-
Peoples Energy Corporation (NYSE-PGL)	2,086.1	71	1,818.0	0.87	A-	Aa3	49	12.3	8.7	11.20	-
Piedmont Natural Gas Co., Inc. (NYSE-PNY)	1,150.7	57	1,163.9	1.01	A	A3	57	10.5	9.4	11.30	-
Questar Corporation (NYSE-STR)	1,314.0	48	2,647.7	2.01	A+	A2	52	16.0	10.8	11.20	12/02
RGC Resources, Inc. (NDQ-RGCO)	100.4	73	70.6	0.70	NR	NR	50	10.6	8.4	9.85	-
SEMCO Energy, Inc. (NYSE-SEN)	525.6	80	515.1	0.98	BB	Ba2	13	NM	7.2	11.98	-
South Jersey Industries, Inc. (NYSE-SJI)	629.9	78	683.7	1.09	A	Baa1	39	13.6	8.1	11.25	01/97
Southern Union Company (NYSE-SUG)	1,236.2	95	3,106.6	2.51	BBB+	Ba1	25	5.8	4.8	11.09	-
Southwest Gas Corporation (NYSE-SWX)	1,219.4	83	2,017.1	1.65	BBB-	Baa2	35	7.2	7.1	11.48	-
Southwestern Energy Company (NYSE-SWN)	289.0	79	693.3	2.40	BBB	Ba2	53	12.5	9.3	11.30	11/96
UGI Corporation (NYSE-UGI)	2,882.9	24	1,336.9	0.46	BBB+	A3	29	21.4	10.6	-	07/96
WGL Holdings, Inc. (NYSE-WGL)	2,072.9	63	1,629.8	0.79	AA-	A2	54	13.0	10.0	11.05	-
Williams Companies, Inc. (NYSE-WMB)	12,363.3	11	12,188.8	0.99	B+	B1	24	NM	2.4		
AVERAGE							42	12.6	8.6	11.46	

WATER

COMPANY	LATEST 12 MONTHS EARNINGS AVAILABLE	PER SHARE EARNINGS	PER SHARE CURRENT ANNUAL DIVIDEND
American States Water Co. (NYSE-AWR)	6/03	1.12	0.88
Artesian Resources Corp. (NDQ-ARTNA)	6/03	1.18	0.79
California Water Service Group (NYSE-CWT)	6/03	0.99	1.13
Connecticut Water Service, Inc. (NDQ-CTWS)	6/03	1.09	0.82
Middlesex Water Company (NDQ-MSEX)	6/03	0.95	0.86
Pennichuck Corporation (NDQ-PNNW)	6/03	1.22	0.86
Philadelphia Suburban Corp. (NYSE-PSC)	6/03	1.19	0.56
SJW Corporation (ASE-SJW)	6/03	4.98	2.91
Southwest Water Company (NDQ-SWWC)	6/03	0.51	0.23
York Water Company (NDQ-YORW)	6/03	0.60	0.54
AVERAGE			

INTERNATIONAL

COMPANY	LATEST 12 MONTHS EARNINGS AVAILABLE	PER SHARE EARNINGS	PER SHARE CURRENT ANNUAL DIVIDEND
BCE, Inc. (NYSE-BCE)	6/03	1.53	0.88
BT Group PLC (NYSE-BTY)	6/03	2.53	1.44
Philippine Long Distance Tel. Co. (NYSE-PHI)	6/03	0.04	0.00
Telecom Argentina (NYSE-TEO)	6/03	0.49	0.00
Telecom New Zealand (NYSE-NZT)	6/03	0.22	0.93
AVERAGE			

COMPANIES

DATA ($) BOOK VALUE (1)	STOCK PRICE 8/19	COMMON SHARES O/S MILL	PERCENT (2) DIV PAYOUT	DIV YIELD	MKT/ BOOK	DIV/ BOOK (2)	PRICE EARN MULT	
14.02	25.89	15.2	79	3.4	185	6.3	23.1	
13.38	25.47	3.9	67	3.1	190	5.9	21.6	
12.81	26.10	15.2	114	4.3	204	8.8	26.5	
10.11	27.85	8.0	75	2.9	275	8.1	25.6	
9.94	26.90	7.9	91	3.2	271	8.7	28.3	
12.56	25.82	2.4	70	3.3	206	6.8	21.2	
7.76	23.47	69.8	47	2.4	303	7.2	19.7	
53.10	86.00	3.0	58	3.4	162	5.5	17.3	
7.28	14.25	10.2	45	1.6	196	3.2	27.9	
5.91	18.20	6.4	90	3.0	308	9.1	30.3	
			74	3.1	230	7.0	24.2	

COMPANIES

DATA ($) BOOK VALUE (1)	STOCK PRICE 8/19	COMMON SHARES O/S MILL	PERCENT (2) DIV PAYOUT	DIV YIELD	MKT/ BOOK	DIV/ BOOK (2)	PRICE EARN MULT	
9.31	21.99	919.3	57	4.0	236	9.4	14.4	
5.77	30.30	862.3	57	4.8	525	25.0	12.0	
9.38	9.43	169.0	0	0.0	101	NM	NM	
3.84	5.78	196.8	0	0.0	151	NM	11.7	
4.36	24.20	235.9	NM	3.8	555	21.3	NM	
			29	2.5	314	18.6	12.7	

WATER

COMPANY	OPER REV $ MILL (1)	% WAT REV	NET PLANT $ MILL	NET PLANT PER $ REV (1)
American States Water Co. (NYSE-AWR)	210.4	88	522.3	2.48
Artesian Resources Corp. (NDQ-ARTNA)	36.2	97	145.7	4.02
California Water Service Group (NYSE-CWT)	261.7	100	653.4	2.50
Connecticut Water Service, Inc. (NDQ-CTWS)	46.6	100	186.1	4.00
Middlesex Water Company (NDQ-MSEX)	63.1	100	198.1	3.14
Pennichuck Corporation (NDQ-PNNW)	20.3	89	61.0	3.01
Philadelphia Suburban Corp. (NYSE-PSC)	418.1	95	1,377.3	3.29
SJW Corporation (ASE-SJW)	145.0	98	286.3	1.97
Southwest Water Company (NDQ-SWWC)	147.5	35	134.1	0.91
York Water Company (NDQ-YORW)	19.8	87	96.2	4.86
AVERAGE				

INTERNATIONAL

COMPANY	OPER REV $ MILL (1)	% TEL REV LOCAL OR CLEC	NET PLANT $ MILL	NET PLANT PER $ REV (1)
BCE, Inc. (NYSE-BCE)	13,086.4	33	15,174.1	1.16
BT Group PLC (NYSE-BTY)	30,885.3	64	25,870.1	0.84
Philippine Long Distance Tel. Co. (NYSE-PHI)	1,597.5	58	4,589.6	2.87
Telecom Argentina (NYSE-TEO)	1,305.9	54	3,117.6	2.39
Telecom New Zealand (NYSE-NZT)	3,023.2	21	2,699.4	0.89
AVERAGE				

COMPANIES

S&P BOND RATING	MOODY'S BOND RATING	COMMON EQUITY RATIO (3)	% RETURN ON BOOK VALUE		REGULATION	
			COMMON EQUITY (4)	TOTAL CAPITAL	ALLOWED ROE	ORDER DATE
A+	A2	43	8.2	7.4	10.00	4Q/99
NR	NR	43	9.1	8.0	10.50	04/03
A+	A1	37	7.2	6.6	10.35	-
NR	NR	55	11.4	9.1	12.70	03/91
A+	A2	41	9.6	6.9	10.38	-
NR	NR	52	9.9	8.6	10.33	-
AA-	NR	43	16.0	11.0	10.15	-
NR	NR	56	9.7	8.1	9.95	04/01
NR	NR	49	8.2	7.2	9.84	05/03
NR	NR	51	10.2	9.0	-	08/01
		47	10.0	8.2	10.47	

COMPANIES

S&P BOND RATING	MOODY'S BOND RATING	COMMON EQUITY RATIO (3)	% RETURN ON BOOK VALUE		REGULATION	
			COMMON EQUITY (4)	TOTAL CAPITAL	ALLOWED ROE	ORDER DATE
NR	A3	36	20.9	10.4		
NR	Baa1	16	NM	11.1		
NR	Ba3	31	2.3	4.8		
NR	Ca	19	NM	8.2		
NR	A3	27	NM	17.3		
		26	11.6	10.4		

GLOSSARY OF TERMS

Latest 12 Month Earnings Available -
Earnings per share as reported, based upon the latest 12 months ending as of the last day of the month reported in this column.

Earnings -
Earnings per share as reported before extraordinary items for the latest 12 months ending on the date reported.

Current Annual Dividend -
Latest quarterly dividend per share annualized.

Book Value -
Common equity divided by Common Shares Outstanding for the latest end figures available.

Price -
Closing market price per share of common stock on the date cited at the head of the column.

Common Shares Outstanding -
Common shares Outstanding for the latest quarter end figures available.

Dividend Payout -
Annualized Dividend per share divided by the reported Earnings per Share, multiplied by 100.

Dividend Yield -
Annualized Dividend per share divided by the market price per share of of common stock reported, multiplied by 100.

Market/Book Ratio -
Market price per share of common stock reported, divided by the by the reported Book Value per share multiplied by 100.

Dividend/Book Ratio -
Annualized Dividend per share divided by the reported Book Value per share, multiplied by 100

Price-Earnings Multiple Ratio -
Market price per share of common stock reported divided by the reported earnings per share.

Operating Revenue -
Total operating revenues for the latest 12 months as available.

% Electric /Gas /Water /Telephone Revenue -
Percentage of revenues attributable to Electric/Gas/Water/Telecomm. operations relative to total Operating Revenue. Company groupings are based on revenue percentages and SIC classification criteria.

Net Plant -
Total Property, Plant and Equipment less Depreciation and Contributions in Aid of Construction for the latest quarter end figures available.

Net Plant Per Revenue-
Net Plant as reported divided by Operating Revenue as reported.

Standard & Poor's and Moody's Bond Ratings-
Ratings for each company's most senior long term debt security. For holding companies, ratings are based on an average of the bond ratings available for the subsidiaries.

Common Equity Ratio -
Common Equity capital for the latest quarter divided by total capital as reported, multiplied by 100. Total capital is equal to the sum of long-term debt, current maturities, short-term debt, preferred stock and common equity for the latest quarter end figures available.

% Return on Book Value -- Common Equity -
Income Available for Common Equity divided by Average Common Equity, multiplied by 100. Average common equity based upon the most recent beginning and ending moving 12 month period available.

% Return on Book Value --Total Capital -
Income before Interest Charges (inclusive of taxes) divided by Average Total Capitalization, multiplied by 100. Average total capitalization based upon the most recent beginning and ending four quarter values available.

Allowed R O E -
Most recent reported state-level allowed return rate on common equity (ROE). ROE for companies operating in multiple jurisdictions are averages. Various companies have received incentive-base ROE authorizations that are not reported upon in this report

Order Date -
The date of the commission order authorizing reported ROE. For companies operating in multiple jurisdictions, no date is given because because reported ROE is an average derived from multiple commission orders issued at different times.

(NYSE) - New York Stock Exchange.

(ASE) - American Stock Exchange.

(NDQ) - Nasdaq.

NM - Not Meaningful.

NA - Not Available.

Additional Notes -

(1) Balance sheet values are the latest quarter end figures as available Income statement figures are for the latest 12 month available

(2) Based on per share value.

(3) Based on permanent capital. (The sum of long-term debt, current maturities, short term debt, preferred stock and common equity capital.)

(4) In many instances, available information require that Per Share and % Return on Book Value of Common Equity /Total Capital derived from figures that represent financial activity from different 12 month periods.

(5) The following companies do not pay cash dividends. However, they do pay a quarterly stock dividend that is non-taxable upon receipt:
Citizens Utilities Company (NYSE-CZN)
Commonwealth Telephone Enterprises (NDQ-CTCO)
Southern Union Company (NYSE-SUG)

(6) The telephone companies have been divided into three groups: Telephone Companies, Small Telephone Companies and International Telephone Companies. All International Telephone companies included in our reports are located outside the United States and provide local telephone service around the world. We have divided the telephone companies located in the U.S. based upon their annual revenues. If a company generates less than $200 million, it is included in the small company group, otherwise it is considered a large telephone company. Also due to the current changes taking place in the telecommunications industry, we have decided to include some independent telephone companies which offer local telephone service. And, we have decided to include the major Competitive Local Exchange Carriers (CLECs), which have been operating as CLECs for at least 2 years, and which are publicly traded.

The high costs of maintaining and upgrading the country's water and wastewater distribution systems have led to widespread consolidation in the Water Utility Industry.

The Water utility stocks in this review are not timely for year-ahead investment. Income-oriented investors may, however, find an appealing choice here, based upon above-average Safety ranks and healthy dividend payouts.

The Need For Consolidation

Long-term trends in the Water Utility Industry indicate that infrastructure costs will continue to escalate. Water Utilities must maintain and upgrade existing facilities in order to remain in compliance with increasingly strict rules mandated by the Environmental Protection Agency (EPA) and other local regulators. Many of the water/wastewater systems that are presently in use were originally built about 100 years ago. The EPA and other industry sources indicate that hundreds of billions of dollars over the next 20 years will be needed to repair the nation's entire water system. The Water Infrastructure Network believes that there will be a $12 billion annual shortfall for wastewater infrastructure over that period, and long-term help from the federal government is needed to solve the problem. Also, transportation costs will continue to rise, as nearby sources of water are exhausted. Water is difficult and expensive to transport, because it is heavy and cannot be compressed. Increased federal spending will cover some of the industry's long-term costs, but water companies will probably foot most of the bill.

The costs of staying in compliance with numerous laws are particularly burdensome for smaller utilities because they have a smaller base of customers over which they can spread costs. Small and mid-sized water companies usually welcome takeover offers from large-scale suitors and the significant capital resources they bring. The larger utilities benefit from economies of scale, which enables them to reduce overhead. They also gain enhanced geographic diversity from acquisitions, which reduces their susceptibility to weather fluctuations that may cause undesirable volatility in earnings. The heavy regulatory oversight that the industry faces means that some local regulators are bound to be more cooperative with utilities than officials from a different locale. A multistate territory helps to limit a company's exposure to especially onerous regulatory atmospheres.

INDUSTRY TIMELINESS: 92 (of 98)

In the past few years, large foreign utilities have swallowed up domestic water companies in an effort to gain exposure to this country's stable regulatory environment and steady population growth.

Regulatory Challenges

These are difficult times for water utilities. Budget deficits at the federal, state, and local levels imply that scarce public funds will likely be allocated to places other than major infrastructure projects. This hardship is exacerbated by increased spending by the industry on security to protect the nation's water-distribution network from potential attacks. The industry has, however, sought regulatory relief through tort reform and changes in the tax code. In particular, they are seeking laws to make compliance with federal drinking water standards a defense in lawsuits involving contaminants covered by such standards, and they are looking for legislation that would remove existing volume caps on private activity bonds for infrastructure improvements.

Meeting Government Regulations

The Safe Drinking Water Act (SDWA) of 1974 (amended in 1996) authorizes the EPA to work with state and local governments to periodically test for impurities in drinking water. The EPA regulates the levels of contaminants that are acceptable per a specified amount of water. These standards have been developed taking into account the health effects of chemicals, measurement capabilities, and technical feasibility. Water utilities spend a large portion of their annual capital budgets on infrastructure improvements in order to stay in compliance with the SDWA, the Clean Water Act, and numerous state and local laws.

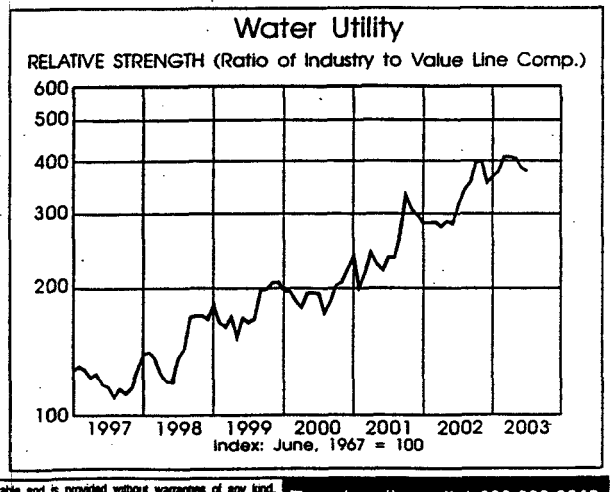
Investment Advice

None of the stocks in the industry are ranked to outperform the year-ahead market. Nevertheless, the recent passage of a federal tax bill has reduced the top rate investors pay on dividend income to 15%. The change has enhanced the popularity of income stocks, including water utilities. Also, *Philadelphia Suburban* and *California Water* have above-average Safety ranks, and offer decent risk-adjusted total return potential over the coming 3 to 5 years.

Joseph Espaillat

Composite Statistics: Water Utility Industry

1999	2000	2001	2002	2003	2004		06-08
637.2	704.3	751.8	794.4	*835*	*880*	Revenues ($mill)	*1090*
72.4	90.9	95.4	106.6	*110*	*130*	Net Profit ($mill)	*180*
40.0%	41.2%	40.2%	38.8%	*39.0%*	*39.5%*	Income Tax Rate	*40.0%*
--	--	--	--	*Nil*	*.5%*	AFUDC % to Net Profit	*.5%*
51.1%	50.3%	52.4%	53.9%	*53.0%*	*51.5%*	Long-Term Debt Ratio	*51.0%*
48.3%	49.3%	47.2%	45.9%	*46.5%*	*48.5%*	Common Equity Ratio	*49.0%*
1444.7	1661.0	1840.7	1973.6	*2200*	*2380*	Total Capital ($mill)	*2900*
2100.3	2342.5	2532.3	2751.1	*2990*	*3180*	Net Plant ($mill)	*3850*
7.4%	7.0%	6.8%	7.0%	*6.5%*	*7.0%*	Return on Total Cap'l	*7.5%*
11.5%	10.7%	10.6%	11.2%	*10.0%*	*10.5%*	Return on Shr. Equity	*12.0%*
11.5%	10.8%	10.7%	11.2%	*10.0%*	*11.0%*	Return on Com Equity	*12.0%*
3.8%	3.6%	3.3%	3.9%	*3.0%*	*4.0%*	Retained to Com Eq	*5.5%*
68%	67%	69%	66%	*75%*	*65%*	All Div'ds to Net Prof	*54%*
19.5	18.6	22.6	21.5			Avg Ann'l P/E Ratio	*13.5*
1.11	1.21	1.16	1.17	*Bold figures are Value Line estimates*		Relative P/E Ratio	*.90*
3.5%	3.6%	3.1%	3.1%			Avg Ann'l Div'd Yield	*3.0%*



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AMER. STATES WATER NYSE-AWR

RECENT PRICE 26.30 | P/E RATIO 20.2 (Trailing: 20.4 Median: 15.8) | RELATIVE P/E RATIO 1.16 | DIV'D YLD 3.3% | VALUE LINE 1421

TIMELINESS 4 Lowered 5/23/03
SAFETY 3 New 2/4/00
TECHNICAL 3 Raised 5/16/03
BETA .60 (1.00 = Market)

2006-08 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(+15%)	7%
Low	19	(-30%)	-3%

Insider Decisions

	S	O	N	D	J	F	M	A	M
to Buy	0	0	0	0	1	0	0	0	3
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	1	0	0	3

Institutional Decisions

	3Q2002	4Q2002	1Q2003
to Buy	39	36	41
to Sell	39	34	30
Hld's(000)	5713	5723	5593

	High:	13.8	16.3	14.7	14.0	16.1	17.1	19.5	26.5	25.3	26.4	29.0	29.0			Target Price Range 2006	2007
	Low:	10.7	13.1	10.2	10.5	12.5	13.5	14.1	14.8	16.7	19.0	20.3	21.6				

LEGENDS
1.20 x Dividends p sh divided by Interest Rate
Relative Price Strength
2-for-1 split 10/93
3-for-2 split 6/02
Options: No
Shaded areas indicate recession

% TOT. RETURN 6/03

	THIS STOCK	VL ARITH. INDEX
1 yr.	6.7	5.5
3 yr.	53.0	12.9
5 yr.	83.0	28.5

1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	© VALUE LINE PUB., INC.	06-08
8.35	8.58	9.12	9.58	9.15	10.10	9.27	10.43	11.03	11.37	11.44	11.02	12.91	12.17	13.06	13.78	*13.40*	*14.00*	Revenues per sh	*16.30*
1.34	1.13	1.44	1.49	1.78	1.81	1.67	1.68	1.75	1.75	1.85	2.04	2.28	2.20	2.53	2.54	*2.45*	*2.70*	"Cash Flow" per sh	*3.30*
.89	.65	.92	.94	1.19	1.15	1.11	.95	1.03	1.13	1.04	1.08	1.19	1.28	1.35	1.34	*1.30*	*1.45*	Earnings per sh [A]	*1.80*
.64	.67	.69	.72	.73	.77	.79	.80	.81	.82	.83	.84	.85	.86	.87	.87	*.88*	*.90*	Div'd Decl'd per sh [B] ■	*.95*
2.45	2.39	2.46	2.53	2.77	2.31	1.90	2.43	2.19	2.40	2.58	3.11	4.30	3.09	3.18	2.68	*4.75*	*4.75*	Cap'l Spending per sh	*5.60*
7.11	7.07	7.31	7.54	8.39	8.85	9.95	10.07	10.29	11.01	11.24	11.48	11.82	12.74	13.22	14.05	*14.90*	*14.90*	Book Value per sh	*17.70*
9.31	9.35	9.39	9.43	9.91	9.96	11.71	11.77	11.77	13.33	13.44	13.44	13.44	15.12	15.12	15.18	*16.80*	*16.80*	Common Shs Outst'g [C]	*16.80*
10.0	14.2	9.7	10.2	8.8	10.6	13.4	12.8	11.6	12.6	14.5	15.5	17.1	15.9	16.7	18.3	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.0*
.67	1.18	.73	.78	.56	.64	.79	.84	.78	.79	.84	.81	.97	1.03	.86	1.00			Relative P/E Ratio	*.80*
7.2%	7.4%	7.7%	7.5%	7.0%	6.3%	5.3%	6.6%	6.7%	5.8%	5.5%	5.0%	4.2%	4.2%	3.9%	3.6%			Avg Ann'l Div'd Yield	*4.1%*
						108.5	122.7	129.8	151.5	153.8	148.1	173.4	184.0	197.5	209.2	*225*	*235*	Revenues ($mill)	*275*
						12.0	11.3	12.2	13.5	14.1	14.6	16.1	18.0	20.4	20.3	*21.0*	*24.5*	Net Profit ($mill)	*31.0*
						31.3%	43.9%	41.9%	43.3%	41.1%	40.9%	46.0%	45.7%	43.0%	38.9%	*40.0%*	*40.0%*	Income Tax Rate	*41.0%*
						--	--	--	--	--	--	--	--	--	--	*Nil*	*Nil*	AFUDC % to Net Profit	*Nil*
						41.5%	43.5%	46.6%	41.9%	43.0%	43.6%	51.0%	47.5%	54.9%	52.0%	*48.0%*	*47.0%*	Long-Term Debt Ratio	*50.0%*
						57.4%	55.5%	52.5%	57.3%	56.3%	55.7%	48.4%	51.9%	44.7%	48.0%	*52.0%*	*53.0%*	Common Equity Ratio	*50.0%*
						203.0	213.5	230.6	256.0	268.4	277.1	328.2	371.1	447.6	444.4	*490*	*490*	Total Capital ($mill)	*615*
						295.0	314.9	335.0	357.8	383.6	414.8	449.6	509.1	539.8	563.3	*605*	*640*	Net Plant ($mill)	*800*
						7.8%	7.1%	7.2%	6.9%	6.9%	7.0%	6.6%	6.4%	6.1%	6.5%	*6.0%*	*6.5%*	Return on Total Cap'l	*6.5%*
						10.1%	9.4%	9.9%	9.0%	9.2%	9.4%	10.0%	9.2%	10.1%	9.5%	*8.5%*	*9.5%*	Return on Shr. Equity	*10.0%*
						10.2%	9.5%	10.0%	9.0%	9.2%	9.4%	10.1%	9.3%	10.1%	9.5%	*8.5%*	*9.5%*	Return on Com Equity	*10.0%*
						2.9%	1.6%	2.1%	2.4%	1.8%	2.1%	2.9%	3.0%	3.6%	3.3%	*2.5%*	*3.5%*	Retained to Com Eq	*5.0%*
						72%	84%	79%	73%	80%	78%	72%	69%	65%	65%	*68%*	*62%*	All Div'ds to Net Prof	*53%*

CAPITAL STRUCTURE as of 3/31/03
Total Debt $274.2 mill. Due in 5 Yrs $63.1 mill.
LT Debt $230.9 mill. LT Interest $17.0 mill.
(Total interest coverage: 2.9x) (52% of Cap'l)

Leases, Uncapitalized: None
Pension Assets-12/02 $39.8 mill.
Oblig. $49.1 mill.
Pfd Stock None. Pfd Div'd None.

Common Stock 15,194,865 shs.
as of 5/14/03
MARKET CAP: $400 million (Small Cap)

CURRENT POSITION ($MILL.)	2001	2002	3/31/03
Cash Assets	30.5	18.4	16.4
Receivables	10.6	10.8	10.4
Inventory (Avg Cst)	1.0	.9	1.0
Other	45.7	21.7	18.9
Current Assets	87.8	51.8	46.7
Accts Payable	13.9	11.6	8.4
Debt Due	20.8	48.3	43.3
Other	28.9	19.6	23.1
Current Liab.	63.6	79.5	74.8
Fix. Chg. Cov.	327%	285%	208%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	3.0%	3.0%	*4.0%*
"Cash Flow"	3.5%	6.5%	*5.5%*
Earnings	2.0%	4.5%	*6.0%*
Dividends	1.5%	1.0%	*2.0%*
Book Value	5.0%	4.0%	*5.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2000	38.7	45.4	55.3	44.6	184.0
2001	40.3	49.9	59.4	47.9	197.5
2002	44.5	52.8	61.6	50.3	209.2
2003	46.7	*57.0*	*67.0*	*54.3*	*225*
2004	*49.0*	*60.0*	*69.0*	*57.0*	*235*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2000	.21	.29	.57	.21	1.28
2001	.21	.33	.63	.18	1.35
2002	.25	.36	.50	.23	1.34
2003	.20	*.35*	*.55*	*.20*	*1.30*
2004	*.25*	*.38*	*.60*	*.22*	*1.45*

Calendar	QUARTERLY DIVIDENDS PAID [B] ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.213	.213	.213	.213	.85
2000	.213	.213	.213	.217	.86
2001	.217	.217	.217	.217	.87
2002	.217	.217	.217	.221	.87
2003	.221	.221			

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Southern California Water Company, it supplies water to 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to approximately 22,000 customers in the city of Big Bear Lake and in areas of San Bernardino County. Acquired Chaparral City Water of Arizona (10/00); 11,400 customers. Has about 500 employees. Off. & dir. own less than 1% of common stock (4/03 Proxy). Chairman: Lloyd Ross. President & CEO: Floyd Wicks. Incorporated: CA. Add.: 630 East Foothill Boulevard, San Dimas, CA 91773. Tel.: 909-394-3600. Web: www.gswater.com.

American States Water Company's second-half share earnings will likely be in line with last year's total. Although the utility will benefit from a recent $2.1 million rate decision (to be recovered over the next one to two years), ongoing delays on rate decisions at the California Public Utilities Commission (CPUC) will hamper bottom-line growth. Regulatory delays cost the company about $0.09 a share in 2002. Also, elevated operating expenses and higher depreciation expense will likely hurt earnings. Elsewhere, we expect management to ramp up its capital expenditures this year after a couple of years of cutbacks stemming from a cash-preservation program. American will probably finance these expenditures with borrowings and an equity offering later in the year. Investors ought to note that an equity offering would dilute share earnings.

The company continues to seek regulatory relief. American States Water filed a rate case last October that has the potential to add $25.8 million to revenues if approved by the CPUC. Moreover, it has applied to the CPUC to recognize its contracts for energy with Pinnacle West as a regulatory asset. If this were to happen, previously unrealized losses associated with these contracts would be reversed, enhancing earnings.

American should generate moderate share-net growth out to 2006–2008. Continual rate increases and steady population growth ought to maintain revenue momentum. Too, the company's strategy of purchasing small-sized water utilities outside of California should reduce its exposure to the state's onerous regulatory environment, while providing a boost to the top line.

These shares are ranked to underperform the market over the coming six to 12 months. Indeed, if the market continues to rebound, conservative equities such as this one will probably get left behind. Moreover, the stock has negligible total-return potential over the coming 3 to 5 years. Nonetheless, income-oriented investors may find this offering attractive because of the solid dividend payout, and the favorable overall Price Stability rating of the stock.

Joseph Espaillat — *August 1, 2003*

Company's Financial Strength	B+
Stock's Price Stability	85
Price Growth Persistence	45
Earnings Predictability	85

(A) Primary earnings. Excludes nonrecurring gains: '91, 73c; '92, 13c. Next earnings report due late Oct.

(B) Dividends historically paid in early-March, June, September, December. ■ Div'd reinvestment plan available.

(C) In millions, adjusted for splits.

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CALIFORNIA WATER NYSE-CWT

RECENT PRICE 29.88 | P/E RATIO 27.2 (Trailing: 27.9, Median: 16.0) | RELATIVE P/E RATIO 1.56 | DIV'D YLD 3.7% | VALUE LINE 1422

TIMELINESS 4 Lowered 8/1/03
SAFETY 2 Lowered 8/11/95
TECHNICAL 3 Lowered 7/18/03
BETA .60 (1.00 = Market)

2006-08 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	35	(+15%)	7%
Low	25	(-15%)	Nil

Insider Decisions

	S	O	N	D	J	F	M	A	M
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	3Q2002	4Q2002	1Q2003
to Buy	26	28	24
to Sell	13	10	18
Hld's(000)	2633	2901	2803

	High:	17.5	20.6	20.5	17.6	21.9	29.6	33.8	32.0	31.4	28.6	26.9	31.4
	Low:	13.1	16.1	14.7	14.8	16.3	18.6	20.8	22.6	21.5	22.9	20.5	23.7

LEGENDS
— 1.33 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 1/98
Options: No
Shaded areas indicate recession

Target Price Range 2006 | 2007 | 2008

% TOT. RETURN 6/03

	THIS STOCK	VL ARITH. INDEX
1 yr.	16.6	5.5
3 yr.	35.3	12.9
5 yr.	42.0	26.5

1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	© VALUE LINE PUB., INC.	06-08
10.13	10.03	10.33	10.93	11.18	12.29	13.34	12.59	13.17	14.48	15.48	14.76	15.96	16.16	16.26	17.33	*15.60*	*14.90*	Revenues per sh	*19.15*
1.94	1.87	1.89	1.97	1.98	1.92	2.25	2.02	2.07	2.50	2.92	2.60	2.75	2.52	2.20	2.65	*2.50*	*2.75*	"Cash Flow" per sh	*3.60*
1.32	1.23	1.20	1.25	1.21	1.09	1.35	1.22	1.17	1.51	1.83	1.45	1.53	1.31	.94	1.25	*1.10*	*1.45*	Earnings per sh [A]	*1.95*
.74	.80	.84	.87	.90	.93	.96	.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.12	*1.12*	*1.13*	Div'd Decl'd per sh [B] ●	*1.18*
1.75	2.12	2.40	2.36	3.03	3.09	2.53	2.26	2.17	2.83	2.61	2.74	3.44	2.45	4.09	5.82	*4.70*	*4.25*	Cap'l Spending per sh	*5.30*
8.85	9.30	9.66	10.04	10.35	10.51	10.90	11.56	11.72	12.22	13.00	13.38	13.43	12.90	12.95	13.12	*13.90*	*15.75*	Book Value per sh [C]	*18.45*
11.13	11.34	11.38	11.38	11.38	11.38	11.38	12.49	12.54	12.62	12.62	12.62	12.94	15.15	15.18	15.18	*17.00*	*18.80*	Common Shs Outst'g [D]	*18.80*
10.5	11.5	10.6	10.4	11.2	14.1	13.6	14.1	13.7	11.9	12.6	17.8	17.8	19.6	27.1	19.8	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*14.5*
.70	.95	.80	.77	.72	.86	.80	.92	.92	.75	.73	.93	1.01	1.27	1.39	1.08			Relative P/E Ratio	*.95*
5.3%	5.7%	6.6%	6.7%	6.6%	6.1%	5.2%	5.8%	6.4%	5.8%	4.6%	4.2%	4.0%	4.3%	4.4%	4.5%			Avg Ann'l Div'd Yield	*4.2%*
						151.7	157.3	165.1	182.8	195.3	186.3	206.4	244.8	246.8	263.2	*265*	*280*	Revenues ($mill)	*360*
						15.5	14.4	14.7	19.1	23.3	18.4	19.9	20.0	14.4	19.1	*18.5*	*27.5*	Net Profit ($mill)	*37.0*
						40.6%	40.0%	40.1%	38.9%	37.4%	36.4%	37.9%	42.3%	39.4%	39.7%	*42.0%*	*42.0%*	Income Tax Rate	*42.0%*
						--	--	--	--	--	--	--	--	--	--	*Nil*	*Nil*	AFUDC % to Net Profit	*Nil*
						50.4%	46.6%	49.2%	47.4%	45.4%	44.2%	46.9%	48.9%	50.3%	55.3%	*57.0%*	*53.0%*	Long-Term Debt Ratio	*51.5%*
						48.2%	52.2%	49.7%	51.4%	53.5%	54.7%	52.0%	50.2%	48.8%	44.0%	*42.5%*	*46.5%*	Common Equity Ratio	*48.0%*
						257.1	276.9	296.0	299.9	306.7	308.6	333.8	388.8	402.7	453.1	*555*	*635*	Total Capital ($mill)	*725*
						391.7	407.9	422.2	443.6	460.4	478.3	515.4	582.0	624.3	697.0	*780*	*820*	Net Plant ($mill)	*950*
						8.1%	7.1%	6.8%	8.3%	9.4%	7.8%	7.8%	6.8%	5.3%	5.9%	*5.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
						12.2%	9.7%	9.8%	12.1%	13.9%	10.7%	11.2%	10.0%	7.2%	9.4%	*8.0%*	*9.0%*	Return on Shr. Equity	*10.5%*
						12.4%	9.9%	9.9%	12.3%	14.1%	10.8%	11.4%	10.1%	7.2%	9.5%	*8.0%*	*9.0%*	Return on Com Equity	*10.5%*
						3.6%	1.9%	1.2%	3.8%	6.0%	2.8%	3.5%	1.8%	NMF	1.0%	*NMF*	*2.0%*	Retained to Com Eq	*4.0%*
						71%	81%	88%	69%	58%	74%	70%	82%	119%	90%	*102%*	*78%*	All Div'ds to Net Prof	*61%*

CAPITAL STRUCTURE as of 3/31/03
Total Debt $301.7 mill. Due in 5 Yrs $28.5 mill.
LT Debt $270.1 mill. LT Interest $16.4 mill.

(LT interest earned: 2.6x; total int. cov.: 2.4x)

Pension Assets-12/02 $58.3 mill. Oblig. $79.6 mill.
Pfd Stock $3.5 mill. Pfd Div'd $.15 mill.
139,000 shares, 4.4% cumulative ($25 par).

Common Stock 15,182,046 shs.
as of 5/5/03
MARKET CAP: $450 million (Small Cap)

CURRENT POSITION ($MILL.)	2001	2002	3/31/03
Cash Assets	1.0	1.1	1.7
Other	39.4	41.9	36.6
Current Assets	40.4	43.0	38.3
Accts Payable	24.0	23.7	23.0
Debt Due	26.6	24.8	31.6
Other	28.4	43.0	34.2
Current Liab.	79.0	91.5	88.8
Fix. Chg. Cov.	214%	250%	242%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	4.0%	3.0%	*2.5%*
"Cash Flow"	2.5%	-.5%	*6.5%*
Earnings	--	-5.0%	*9.0%*
Dividends	2.0%	1.5%	*1.0%*
Book Value	2.5%	1.0%	*7.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2000	46.6	66.0	76.6	55.6	244.8
2001	47.0	67.0	76.3	56.5	246.8
2002	51.7	69.2	81.4	60.9	263.2
2003	51.3	68.0	*82.0*	*63.7*	*265*
2004	*55.0*	*73.0*	*85.0*	*67.0*	*280*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2000	.09	.40	.60	.22	1.31
2001	.01	.34	.39	.20	.94
2002	.12	.43	.50	.20	1.25
2003	d.05	.30	*.60*	*.25*	*1.10*
2004	*.15*	*.40*	*.62*	*.28*	*1.45*

Calendar	QUARTERLY DIVIDENDS PAID [B] ● Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.272	.271	.271	.271	1.09
2000	.275	.275	.275	.275	1.10
2001	.279	.279	.279	.279	1.12
2002	.28	.28	.28	.28	1.12
2003	.281	.281	•		

BUSINESS: California Water Service Group provides regulated and nonregulated water service to over 2 million people (461,200 customers) in 98 communities in California, Washington, and New Mexico. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Dominguez Services Corp. (5/00); Rio Grande Corp. (11/00). Revenue breakdown, '02: residential, 70%; business, 18%; public authorities, 5%; industrial, 4%; other, 3%. '02 reported deprec. rate: 2.1%. Has about 800 employees. Chairman: Robert W. Foy. President & CEO: Peter C. Nelson. Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwater.com.

California Water's second-quarter results were weak. Year-over-year share net fell 30%, to $0.30, due mainly to continued delays in receiving rate relief from the California Public Utilities Commission (CPUC). The company is still awaiting a decision on 15 rate cases filed in July 2001 that ought to add at least $12.8 million to revenues. Also, cool and wet weather led to lower water usage. Indeed, water sales to existing customers declined $4.5 million. This was partially offset, however, by $1.4 million in sales to new customers and $1.9 million in rate increases. Meanwhile, production costs decreased $1 million because of lower water usage.

The company's results should get better in the second half of 2003. The top line ought to benefit from recent rate decisions for $2.8 million and $1.8 million that are to be collected through June 2004 and June 2005, respectively. CWT plans to submit the third of three filings for the recovery of costs associated with a new treatment plant in the September quarter, and may receive a decision this year. But if it does not, cost containment should help buoy the bottom line.

California Water ought to generate solid share-earnings advances over the coming 3 to 5 years. Ongoing delays at the CPUC will probably continue to plague the company's revenues, but there have been some recent changes to the makeup of the commission. As a result, we expect rate relief to gradually improve for the water utility. Moreover, regular rate increases and steady population growth should help sustain solid revenue momentum. The company recently completed its acquisition of Ka'anapali Water, which is a Hawaii-based, 500-customer utility. We believe that California Water will continue to make small out-of-state purchases like this in an effort to achieve cost synergies and diversify its regulatory environment.

These shares are an untimely selection for investment over the coming 12 months, due to unfavorable price and earnings trends. Although the stock has an above-average Safety rank (2) and appealing dividend-growth prospects, its total-return potential out to 2006–2008 is negligible.

Joseph Espaillat *August 1, 2003*

(A) Basic EPS. Excl. nonrecurring gain (loss): '87, 39c; '00, (7c); '01, 4c; Q2'02, 8c. Next earnings report due late Oct.

(B) Dividends historically paid in mid-Feb., May, Aug., Nov. ● Div'd reinvestment plan available.

(C) Incl. deferred charges. In '02: $31.4 mill., $2.07/sh.

(D) In millions, adjusted for split.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	55
Earnings Predictability	70

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PHILA. SUBURBAN NYSE-PSC

RECENT PRICE 23.67 | P/E RATIO 23.7 (Trailing: 25.7 Median: 18.0) | RELATIVE P/E RATIO 1.36 | DIV'D YLD 2.5% | VALUE LINE 1423

TIMELINESS 3 Lowered 2/1/02
SAFETY 3 Lowered 8/1/03
TECHNICAL 3 Lowered 7/18/03
BETA .70 (1.00 = Market)

2006-08 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	35	(+50%)	12%
Low	25	(+5%)	4%

Insider Decisions

	S	O	N	D	J	F	M	A	M
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	1	1	0	1	
to Sell	0	0	0	0	0	1	0	0	

Institutional Decisions

	3Q2002	4Q2002	1Q2003
to Buy	99	78	85
to Sell	37	55	55
Hld's(000)	24196	23378	23158

	High:	5.3	6.6	6.3	6.9	9.5	14.2	19.2	19.2	20.0	24.6	25.0	25.1			Target Price Range 2006	2007	2008
	Low:	4.4	5.0	5.5	5.6	6.6	7.3	12.1	12.6	10.6	15.7	16.0	19.7					

LEGENDS
2.00 x Dividends p sh divided by Interest Rate
Relative Price Strength
3-for-2 split 7/96
4-for-3 split 1/98
5-for-4 split 12/00
5-for-4 split 12/01
Options: Yes
Shaded areas indicate recession

% TOT. RETURN 6/03

	THIS STOCK	VL ARITH. INDEX
1 yr.	23.9	5.5
3 yr.	62.2	12.9
5 yr.	62.6	26.5

1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	© VALUE LINE PUB., INC.	06-08
4.60	5.57	5.67	3.37	3.57	3.04	2.84	3.03	3.06	3.11	3.36	3.49	4.02	4.11	4.49	4.74	5.00	5.20	Revenues per sh	6.00
.75	.83	.81	.72	.74	.65	.70	.70	.78	.84	.93	1.02	1.20	1.26	1.44	1.57	1.75	1.90	"Cash Flow" per sh	2.45
.36	.37	.34	.41	.41	.39	.41	.43	.49	.50	.57	.66	.70	.78	.85	.90	1.00	1.10	Earnings per sh A	1.45
.30	.30	.30	.32	.32	.33	.34	.35	.36	.38	.40	.43	.45	.47	.50	.54	.57	.60	Div'd Decl'd per sh B■	.70
.92	1.10	1.44	1.26	.90	1.00	.78	.76	.87	.80	.96	1.36	1.50	1.93	1.81	2.00	2.20	2.35	Cap'l Spending per sh	2.85
3.52	3.60	3.65	3.50	3.45	3.48	3.81	4.01	4.10	4.48	4.73	5.34	5.71	6.42	6.91	7.28	7.55	8.00	Book Value per sh	9.90
22.59	22.62	23.56	24.39	24.85	30.72	35.64	35.87	38.25	39.45	40.48	43.32	64.08	67.10	68.39	67.92	69.00	70.50	Common Shs Outst'g C	75.00
14.0	12.3	12.9	10.2	10.8	12.5	14.4	13.5	12.0	15.6	17.8	22.5	21.2	18.2	23.6	23.6	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	21.0
.94	1.02	.98	.76	.69	.76	.85	.89	.80	.98	1.03	1.17	1.21	1.18	1.21	1.29			Relative P/E Ratio	1.40
6.0%	6.5%	6.9%	7.7%	7.2%	6.8%	5.9%	6.0%	6.2%	4.9%	3.9%	2.9%	3.0%	3.3%	2.5%	2.5%			Avg Ann'l Div'd Yield	2.3%
						101.2	108.6	117.0	122.5	136.2	151.0	257.3	275.5	307.3	322.0	345	385	Revenues ($mill)	450
						14.7	15.6	19.0	19.8	23.2	28.8	45.0	50.7	58.5	62.7	70.0	77.5	Net Profit ($mill)	110
						41.5%	42.5%	40.4%	41.4%	40.6%	40.5%	38.4%	38.9%	39.3%	38.5%	39.5%	39.5%	Income Tax Rate	39.5%
						5.5%	.6%	1.6%	--	--	--	1.5%	4.2%	--	--	Nil	1.0%	AFUDC % to Net Profit	2.0%
						49.9%	50.2%	51.9%	54.1%	54.4%	52.7%	52.9%	52.0%	52.2%	54.2%	54.0%	55.0%	Long-Term Debt Ratio	52.0%
						46.7%	47.4%	46.4%	44.0%	44.8%	46.6%	46.7%	47.8%	47.7%	45.8%	46.0%	45.0%	Common Equity Ratio	48.0%
						291.2	303.1	338.0	401.7	427.2	496.6	782.7	901.1	990.4	1076.2	1160	1250	Total Capital ($mill)	1550
						366.2	385.7	436.9	502.9	534.5	609.8	1135.4	1251.4	1368.1	1490.8	1600	1720	Net Plant ($mill)	2100
						7.1%	7.0%	7.7%	6.8%	7.4%	7.6%	7.6%	7.4%	7.8%	7.6%	7.5%	8.0%	Return on Total Cap'l	9.0%
						10.1%	10.4%	11.7%	10.7%	11.9%	12.3%	12.2%	11.7%	12.3%	12.7%	13.0%	14.0%	Return on Shr. Equity	15.0%
						10.2%	10.3%	11.7%	11.2%	12.0%	12.4%	12.3%	11.7%	12.4%	12.7%	13.0%	14.0%	Return on Com Equity	15.0%
						1.6%	2.1%	3.5%	2.8%	3.6%	4.5%	4.3%	4.7%	5.1%	5.2%	6.0%	6.5%	Retained to Com Eq D	8.0%
						85%	81%	71%	75%	70%	64%	65%	60%	59%	59%	58%	55%	All Div'ds to Net Prof	48%

CAPITAL STRUCTURE as of 3/31/03
Total Debt $741.9 mill. Due in 5 Yrs $260.0 mill.
LT Debt $580.8 mill. LT Interest $35.0 mill.
(Total interest coverage: 3.5x)

Pension Assets-12/02 $94.4 mill. Oblig. $131.1 mill.

Pfd Stock $.2 mill. Pfd Div'd $.1 mill.

Common Stock 68,097,741 shares as of 4/29/03

MARKET CAP: $1.6 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2001	2002	3/31/03
Cash Assets	20.8	49.7	49.7
Receivables	56.3	57.7	56.7
Inventory (AvgCst)	4.4	4.6	5.1
Other	8.1	2.7	2.3
Current Assets	89.6	114.7	113.8
Accts Payable	27.7	31.1	17.7
Debt Due	124.6	149.4	161.1
Other	50.3	46.0	49.1
Current Liab.	202.6	226.5	227.9
Fix. Chg. Cov.	335%	347%	340%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	3.0%	7.0%	5.0%
"Cash Flow"	7.5%	11.0%	9.5%
Earnings	7.5%	10.0%	10.0%
Dividends	4.5%	6.0%	5.5%
Book Value	7.0%	9.0%	6.5%

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2000	64.5	68.5	73.3	69.2	275.5
2001	70.2	77.3	84.7	75.1	307.3
2002	71.7	76.6	91.9	81.8	322.0
2003	80.5	*84.5*	*95.0*	*85.0*	*345*
2004	*83.0*	*90.0*	*101*	*91.0*	*365*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2000	.16	.19	.24	.19	.78
2001	.17	.22	.28	.18	.85
2002	.17	.20	.31	.22	.90
2003	.19	*.23*	*.33*	*.25*	*1.00*
2004	*.22*	*.25*	*.35*	*.28*	*1.10*

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.109	.109	.115	.115	.45
2000	.115	.115	.115	.124	.47
2001	.124	.124	.124	.132	.50
2002	.132	.132	.132	.14	.54
2003	.14	.14			

BUSINESS: Philadelphia Suburban Corp., parent of Philadelphia Suburban Water Co. (PSWC), a regulated utility, provides water to approximately 2.0 million residents in Pennsylvania, Ohio, New Jersey, Illinois, Maine and North Carolina. Sold three of four non-water businesses in '91; sold telemarketing group in '93. Acquired Consumers Water 4/99. Water supply revenues '02: residential, 61%; commercial, 17%; industrial & other, 22%. Has about 970 employees. 21,600 stockholders. Officers and directors own 1.6% of the common stock (4/03 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-527-8000. Internet: www.suburbanwater.com.

Philadelphia Suburban Corp. has generated solid operating results thus far in 2003. This is attributable, in part, to the many growth ventures (i.e., new contracts and acquisitions) conducted over the past year. And thanks to substantial rainfall late in 2002 and early this year, the company has been well positioned to meet the heavy demand during the summer months in its core Pennsylvania service territory. (Last year, consumption here was held back by drought restrictions.) Finally, earnings are being boosted by higher water rates in Pennsylvania, New Jersey, and Ohio. All things considered, we believe that Philadelphia Suburban's bottom line will advance in the 10% range this year.

The company remains an active participant in the ongoing consolidation in the water-service industry. The costs required for compliance with current quality standards for drinking water have risen to the point where a number of the many small water suppliers in the United States have been struggling financially. This has resulted in a buyer's market in which a well-capitalized company (such as Philadelphia Suburban) can enlarge its customer base at relatively low cost. The latest additions to its portfolio are Village of Grant Park water system, serving roughly 1,500 residents in Kankakee County, Illinois, and Deep Well Terrace water system, serving around 150 customers in Burlington County, New Jersey. (Note that future acquisitions are excluded from our figures because of timing issues and other uncertainties associated with that strategy.)

Philadelphia Suburban shares are ranked to perform only in line with the market for the coming year. That's based on recent price and earnings momentum. And though we project solid bottom-line advances out to 2006-2008 (aided by rate increases and productivity enhancements), total-return potential at the current quotation is moderate, assuming 5% to 6% average annual dividend growth during that time. These shares possess some positive attributes, though, including a high mark for Price Growth Persistence and a good Price Stability rating.

Frederick L. Harris, III *August 1, 2003*

Company's Financial Strength	B+
Stock's Price Stability	85
Price Growth Persistence	90
Earnings Predictability	100

(A) Primary shares outstanding through '96: diluted thereafter. Excl. nonrec. gains (losses): '90, (47¢); '91, (43¢); '92, (47¢); '99, (14¢); '00, 3¢; '01, 2¢; '02, 6¢. Excl. gain from disc. operations: '96, 3¢. Next earnings report due late Oct. (B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available. (C) In millions, adjusted for stock splits. (D) Return on common equity allowed by PA PUC in '91 rate adjustment: 12.0%. Return on avg. common equity in '02, 13.9%.

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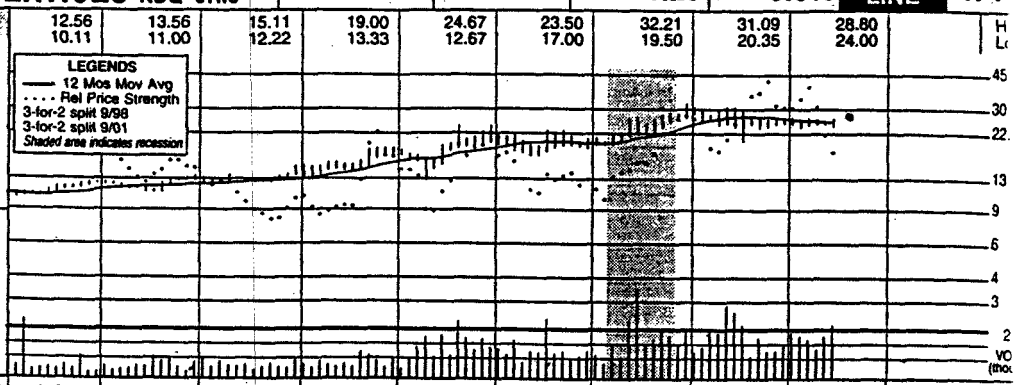
CONN. WATER SERVICES NDQ–CTWS

RECENT PRICE 27.68 | TRAILING P/E RATIO 23.3 | RELATIVE P/E RATIO 1.29 | DIV'D YLD 3.0% | VALUE LINE 471

RANKS

PERFORMANCE 3 Average
Technical 3 Average
SAFETY 3 Average
BETA .60 (1.00 = Market)

Financial Strength B++
Price Stability 85
Price Growth Persistence 50
Earnings Predictability 95



© VALUE LINE PUBLISHING, INC.	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004/2005
SALES PER SH	5.88	5.69	5.67	5.58	5.87	5.70	5.93	5.77	--	
"CASH FLOW" PER SH	1.42	1.46	1.51	1.59	1.65	1.73	1.78	1.78	--	
EARNINGS PER SH	.96	.97	1.00	1.02	1.03	1.09	1.13	1.12	NA	NA/NA
DIV'DS DECL'D PER SH	.75	.76	.77	.78	.79	.79	.80	.81	--	
CAP'L SPENDING PER SH	1.38	1.62	1.99	1.12	1.42	1.43	1.86	1.98	--	
BOOK VALUE PER SH	7.74	8.03	8.26	8.52	8.61	8.92	9.25	10.06	--	
COMMON SHS OUTST'G (MILL)	6.69	6.78	6.79	6.80	7.26	7.28	7.65	7.94	--	
AVG ANN'L P/E RATIO	11.7	12.5	12.9	15.5	18.2	18.2	21.5	24.3	NA	NA/NA
RELATIVE P/E RATIO	.78	.78	.74	.81	1.04	1.18	1.10	1.33	--	
AVG ANN'L DIV'D YIELD	6.6%	6.2%	6.0%	4.9%	4.2%	4.0%	3.3%	3.0%	--	
SALES ($MILL)	39.4	38.6	38.5	37.9	42.6	41.5	45.4	45.8	--	
OPERATING MARGIN	60.8%	44.9%	45.5%	46.2%	48.7%	48.6%	56.1%	57.7%	--	
DEPRECIATION ($MILL)	3.2	3.3	3.5	3.9	4.5	4.7	5.0	5.4	--	
NET PROFIT ($MILL)	6.4	6.6	6.8	7.0	7.5	8.0	8.7	8.8	--	
INCOME TAX RATE	43.8%	37.0%	35.1%	34.3%	40.1%	35.7%	36.1%	33.8%	--	
NET PROFIT MARGIN	16.2%	17.1%	17.7%	18.4%	17.6%	19.2%	19.1%	19.2%	--	
WORKING CAP'L ($MILL)	d4.7	d7.9	d10.4	d3.7	d3.8	.3	d3.3	d5.1	--	
LONG-TERM DEBT ($MILL)	54.5	54.4	54.5	62.5	65.4	64.7	64.0	64.8	--	
SHR. EQUITY ($MILL)	52.6	55.2	56.8	58.7	63.3	65.7	71.6	80.7	--	
RETURN ON TOTAL CAP'L	7.8%	7.6%	7.7%	7.3%	7.4%	7.6%	7.9%	7.4%	--	
RETURN ON SHR. EQUITY	12.1%	12.0%	12.0%	11.9%	11.8%	12.1%	12.1%	10.9%	--	
RETAINED TO COM EQ	2.7%	2.7%	2.8%	2.8%	3.1%	3.2%	3.6%	3.1%	--	
ALL DIV'DS TO NET PROF	78%	78%	77%	76%	74%	74%	71%	72%	--	

Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.

Note: No analyst estimates available.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	--	-2.5%
"Cash Flow"	4.0%	-0.5%
Earnings	2.5%	-1.0%
Dividends	1.0%	1.0%
Book Value	3.5%	8.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/00	9.7	10.2	11.5	10.1	41.5
12/31/01	10.2	11.0	13.5	10.7	45.4
12/31/02	10.3	10.7	13.8	11.0	45.8
12/31/03	10.9				

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/99	.21	.25	.37	.20	1.03
12/31/00	.22	.25	.37	.25	1.09
12/31/01	.30	.25	.38	.20	1.13
12/31/02	.19	.24	.50	.19	1.12
12/31/03	.26				

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2000	.198	.198	.20	.20	.80
2001	.20	.20	.202	.202	.80
2002	.202	.202	.205	.205	.81
2003	.205	.205			

INSTITUTIONAL DECISIONS

	3Q'02	4Q'02	1Q'03
to Buy	14	19	13
to Sell	12	7	12
Hld's(000)	1147	1189	1157

ASSETS ($mill.)	2001	2002	3/31/03
Cash Assets	.1	.5	.9
Receivables	8.2	8.8	8.6
Inventory (Avg cost)	.9	1.0	1.0
Other	.2	.1	1.4
Current Assets	9.4	10.4	11.9
Property, Plant & Equip. at cost	283.7	321.5	--
Accum Depreciation	78.0	88.8	--
Net Property	205.7	232.7	231.8
Other	16.6	21.7	21.6
Total Assets	231.7	264.8	265.3
LIABILITIES ($mill.)			
Accts Payable	6.1	6.5	3.7
Debt Due	4.0	7.2	10.9
Other	2.6	1.8	.3
Current Liab	12.7	15.5	14.9

LONG-TERM DEBT AND EQUITY as of 3/31/03

Total Debt $75.6 mill. Due in 5 Yrs. NA
LT Debt $64.7 mill. Including Cap. Leases NA (44% of Cap'l)
Leases, Uncapitalized Annual rentals NA

Pension Liability None in '02 vs. None in '01

Pfd Stock $.8 mill. Pfd Div'd Paid NMF (1% of Cap'l)

Common Stock 7,947,093 shares (55% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Connecticut Water Services, Inc. acts as the parent company of The Connecticut Water Co. and other subsidiaries, which supply water for residential, commercial, industrial, and municipal purposes in Connecticut. Sales and distributions are affected by seasonal weather fluctuations throughout the year. Profitability is dependent on numerous factors, such as the quantity of rainfall and temperature in a given period of time, industrial demand, prevailing rates of interest for short-term and long-term borrowings, energy rates, and compliance with environmental and water-quality regulations. Connecticut Water owns and operates 10 water filtration treatment plants, including the Guilford Well, Rockville, Westbrook Well, MacKenzie, Hunt Well Field, Stafford Springs, and Reynolds Bridge. Has 191 employees. Chairman, C.E.O. & President: Marshall T. Chiaraluce. Inc.: CT. Address: 93 West Main Street, Clinton, CT 06413. Tel.: 860 669-8636. Internet: http://www.ctwater.com.

A.Z.

August 1, 2003

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 6/30/2003

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
-3.06%	2.83%	-13.57%	56.64%	98.26%

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splits 10/2/92 — 2-1
1/3/02 — 3-2

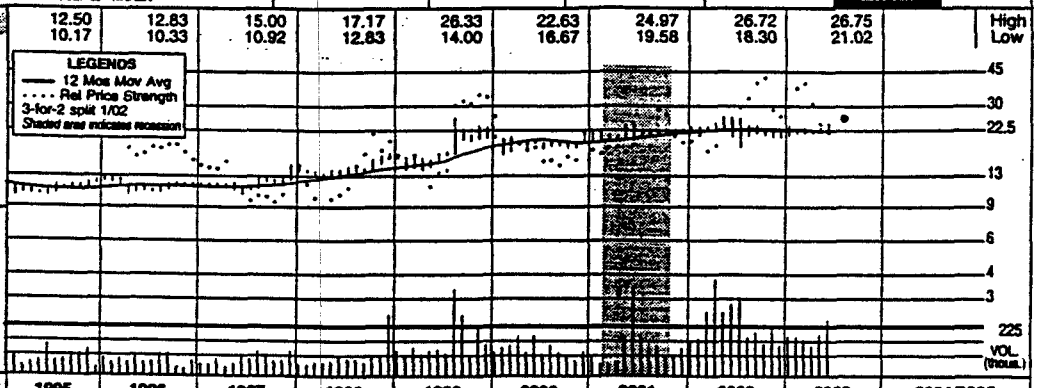
MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 26.05 | TRAILING P/E RATIO 27.1 | RELATIVE P/E RATIO 1.50 | DIV'D YLD 3.3% | VALUE LINE 4714

RANKS

PERFORMANCE 3 Average
Technical 3 Average
SAFETY 2 Above Average
BETA .55 (1.00 = Market)

Financial Strength B+
Price Stability 95
Price Growth Persistence 45
Earnings Predictability 70



© VALUE LINE PUBLISHING, INC.	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004/2005
SALES PER SH	6.08	6.03	6.29	5.85	7.13	7.18	7.82	7.97	–	
"CASH FLOW" PER SH	1.34	1.26	1.36	1.36	1.58	1.32	1.57	1.61	–	
EARNINGS PER SH	.91	.80	.89	.94	1.01	.67	.88	.97	*1.03*[A,B]	*1.15*[C]*/NA*
DIV'DS DECL'D PER SH	.72	.74	.75	.77	.79	.82	.83	.85	–	
CAP'L SPENDING PER SH	1.44	.98	1.60	3.57	3.10	1.76	1.67	2.12	–	
BOOK VALUE PER SH	7.65	7.80	8.00	9.06	9.27	9.31	9.48	9.85	–	
COMMON SHS OUTST'G (MILL)	6.23	6.31	6.40	7.36	7.50	7.59	7.63	7.77	–	
AVG ANN'L P/E RATIO	12.2	14.4	13.4	15.2	17.6	28.7	24.6	23.5	*25.3*	*22.7/NA*
RELATIVE P/E RATIO	.82	.90	.77	.79	1.00	1.87	1.26	1.28	–	
AVG ANN'L DIV'D YIELD	6.5%	6.4%	6.3%	5.4%	4.4%	4.2%	3.8%	3.7%	–	
SALES ($MILL)	37.9	38.0	40.3	43.1	53.5	54.5	59.6	61.9	–	
OPERATING MARGIN	38.8%	36.0%	37.2%	37.0%	33.9%	32.2%	47.2%	47.1%	–	
DEPRECIATION ($MILL)	2.8	2.9	3.1	3.8	4.3	4.9	5.3	5.0	–	
NET PROFIT ($MILL)	5.7	5.2	5.9	6.5	7.9	5.3	7.0	7.8	–	
INCOME TAX RATE	34.3%	32.8%	34.9%	31.5%	28.8%	33.1%	34.8%	33.3%	–	
NET PROFIT MARGIN	15.1%	13.6%	14.5%	15.1%	14.7%	9.7%	11.7%	12.5%	–	
WORKING CAP'L ($MILL)	4.2	2.0	d2.9	14.6	6.8	d2.7	d.9	d9.3	–	
LONG-TERM DEBT ($MILL)	53.0	53.0	52.9	78.0	82.3	81.1	88.1	87.5	–	
SHR. EQUITY ($MILL)	50.3	51.9	56.2	71.7	74.6	74.7	76.4	80.6	–	
RETURN ON TOTAL CAP'L	6.9%	6.4%	6.8%	5.7%	6.4%	4.9%	5.6%	6.0%	–	
RETURN ON SHR. EQUITY	11.3%	10.0%	10.4%	9.1%	10.6%	7.1%	9.1%	9.6%	–	
RETAINED TO COM EQ	2.4%	.8%	1.7%	1.8%	2.5%	NMF	.5%	1.3%	–	
ALL DIV'DS TO NET PROF	80%	92%	85%	81%	78%	121%	94%	87%	–	

Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.

[A] No. of analysts changing earn. est. in last 19 days: 0 up, 0 down. consensus 5-year earnings growth 7.0% per year. [B] Based upon 2 analysts' estimates. [C] Based upon 2 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	4.5%	2.0%
"Cash Flow"	2.5%	2.0%
Earnings	-0.5%	10.0%
Dividends	2.5%	2.0%
Book Value	4.0%	4.0%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/00	13.0	14.1	14.4	13.0	54.5
12/31/01	13.1	14.7	16.1	15.7	59.6
12/31/02	14.3	15.5	17.0	15.1	61.9
12/31/03	15.0				

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/99	.19	.33	.36	.13	1.01
12/31/00	.12	.17	.19	.19	.67
12/31/01	.11	.24	.30	.23	.88
12/31/02	.16	.24	.32	.25	.97
12/31/03	.15	.27	.34	.27	

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2000	.203	.203	.203	.207	.82
2001	.207	.207	.207	.21	.83
2002	.21	.21	.21	.215	.85
2003	.215	.215			

INSTITUTIONAL DECISIONS

	3Q'02	4Q'02	1Q'03
to Buy	16	17	15
to Sell	13	7	10
Hld's(000)	1058	1206	1216

ASSETS ($mill.)	2001	2002	3/31/03
Cash Assets	4.5	2.9	4.9
Receivables	9.5	9.2	8.7
Inventory (Avg cost)	1.0	1.2	1.3
Other	10.1	7.0	6.0
Current Assets	25.1	20.3	20.9
Property, Plant & Equip, at cost	242.7	259.3	--
Accum Depreciation	43.6	47.9	--
Net Property	199.1	211.4	214.0
Other	12.2	12.9	13.1
Total Assets	236.4	244.6	248.0
LIABILITIES ($mill.)			
Accts Payable	2.4	2.1	2.5
Debt Due	13.6	18.3	19.1
Other	10.0	9.2	10.4
Current Liab	26.0	29.6	32.0

LONG-TERM DEBT AND EQUITY as of 3/31/03

Total Debt $106.6 mil. Due in 5 Yrs. NA
LT Debt $87.5 mil.
Including Cap. Leases NA (52% of Cap'l)
Leases, Uncapitalized Annual rentals NA

Pension Liability $5.3 mil. in '02 vs. $5.3 mil. in '01

Pfd Stock $4.1 mil. Pfd Div'd Paid $.3 mil. (2% of Cap'l)

Common Stock 7,810,409 shares (46% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Middlesex Water Company collects, treats, and distributes water for domestic, commercial, industrial, and fire-protection purposes. The company provides water services to retail customers primarily in eastern Middlesex County, NJ, where water services are furnished to approximately 57,000 retail customers, and in Delaware. The retail customers include residential customers, large industrial concerns, and commercial and light industrial facilities. The water utility plant consists of source of supply, pumping, water treatment transmission, distribution, and general facilities. Water is obtained from both surface and groundwater sources. It is also derived from groundwater sources equipped with electric-motor-driven, deep-well, turbine-type pumps. Has 199 employees. C.E.O. & President: Dennis Sullivan. Inc.: NJ. Address: 1500 Ronson Road, Iselin, NJ 08830. Tel.: (732) 634-1500. Internet: http://www.middlesexwater.com.

A.Z

August 1, 2003

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 6/30/2003

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
12.51%	19.78%	-2.58%	43.05%	124.75%

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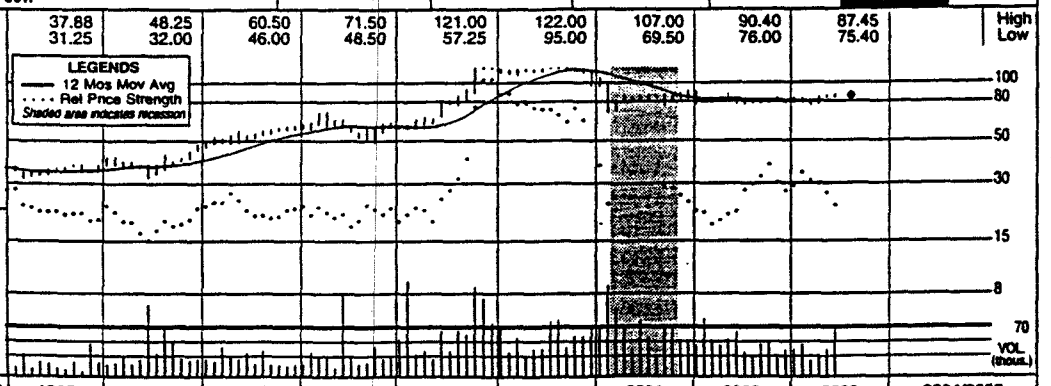
SJW CORP. AMEX-SJW

RECENT PRICE 85.53 | TRAILING P/E RATIO 14.7 | RELATIVE P/E RATIO 0.81 | DIV'D YLD 3.4% | VALUE LINE 4715

RANKS

PERFORMANCE 3 Average
Technical 3 Average
SAFETY 2 Above Average
BETA .50 (1.00 = Market)

Financial Strength B++
Price Stability 100
Price Growth Persistence 65
Earnings Predictability 65



© VALUE LINE PUBLISHING, INC.	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004/2005
SALES PER SH	29.96	32.36	34.72	33.47	38.42	40.44	44.69	47.83	--	
"CASH FLOW" PER SH	5.90	8.59	7.59	7.57	8.58	7.39	8.95	9.28	--	
EARNINGS PER SH	3.55	5.75	4.80	4.54	5.20	3.50	4.60	4.67	5.03 A,B	5.30 C/NA
DIV'DS DECL'D PER SH	2.10	2.22	2.28	2.34	2.40	2.46	2.57	2.76	--	
CAP'L SPENDING PER SH	5.76	6.33	7.60	10.85	10.60	11.31	15.76	12.35	--	
BOOK VALUE PER SH	33.48	37.86	42.12	45.19	47.25	47.40	49.05	50.41	--	
COMMON SHS OUTST'G (MILL)	3.25	3.17	3.17	3.17	3.05	3.05	3.05	3.05	--	
AVG ANN'L P/E RATIO	9.9	6.8	11.2	13.1	15.5	33.1	18.5	17.3	17.0	16.1/NA
RELATIVE P/E RATIO	.66	.43	.65	.68	.88	2.15	.95	.94	--	
AVG ANN'L DIV'D YIELD	6.0%	5.7%	4.3%	3.9%	3.0%	2.1%	3.0%	3.4%	--	
SALES ($MILL)	97.4	102.6	110.1	106.0	117.0	123.2	136.1	145.7	--	
OPERATING MARGIN	41.1%	34.4%	34.8%	36.0%	33.2%	30.2%	64.4%	63.7%	--	
DEPRECIATION ($MILL)	7.6	8.7	8.9	9.6	10.2	11.9	13.2	14.0	--	
NET PROFIT ($MILL)	11.5	18.6	15.2	14.4	15.9	10.7	14.0	14.2	--	
INCOME TAX RATE	40.2%	32.8%	39.9%	40.2%	35.9%	41.0%	34.5%	40.4%	--	
NET PROFIT MARGIN	11.8%	18.1%	13.8%	13.6%	13.6%	8.7%	10.3%	9.8%	--	
WORKING CAP'L ($MILL)	10.7	11.9	7.0	9.4	d3.0	d11.4	d3.8	d4.9	--	
LONG-TERM DEBT ($MILL)	76.5	75.0	75.0	90.0	90.0	90.0	110.0	110.0	--	
SHR. EQUITY ($MILL)	108.9	120.0	133.6	143.2	143.9	144.3	149.4	153.5	--	
RETURN ON TOTAL CAP'L	7.5%	11.0%	8.7%	7.4%	8.2%	5.9%	6.7%	6.9%	--	
RETURN ON SHR. EQUITY	10.6%	15.5%	11.4%	10.1%	11.0%	7.4%	9.4%	9.3%	--	
RETAINED TO COM EQ	4.2%	9.5%	6.0%	4.9%	5.9%	2.2%	4.1%	3.8%	--	
ALL DIV'DS TO NET PROF	61%	39%	48%	52%	46%	70%	56%	59%	--	

Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.

A No. of analysts changing earn. est. in last 19 days: 0 up, 0 down, consensus 5-year earnings growth 4.0% per year. B Based upon one analyst's estimate. C Based upon one analyst's estimate.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	6.5%	7.0%
"Cash Flow"	3.0%	3.5%
Earnings	-2.0%	1.5%
Dividends	3.5%	7.5%
Book Value	5.5%	3.0%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/00	23.6	33.1	39.2	27.3	123.2
12/31/01	24.2	36.4	44.2	31.3	136.1
12/31/02	27.7	38.7	46.2	33.1	145.7
12/31/03	27.8				

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/99	.58	1.34	1.78	1.52	5.20
12/31/00	.44	.89	1.63	.54	3.50
12/31/01	.22	1.37	2.10	.91	4.60
12/31/02	.57	1.31	1.90	.89	4.67
12/31/03	1.73	1.37	2.00	.93	

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2000	.615	.615	.615	.615	2.46
2001	.615	.652	.652	.652	2.57
2002	.69	.69	.69	.69	2.76
2003	.728	.728			

INSTITUTIONAL DECISIONS

	3Q'02	4Q'02	1Q'03
to Buy	14	22	19
to Sell	12	8	10
Hld's(000)	616	644	652

ASSETS ($mill.)	2001	2002	3/31/03
Cash Assets	5.0	.3	1.8
Receivables	13.6	13.9	13.8
Inventory (Avg cost)	.5	.5	.0
Other	1.3	4.0	6.6
Current Assets	20.4	18.7	22.2
Property, Plant & Equip. at cost	517.5	552.4	--
Accum Depreciation	149.7	161.6	--
Net Property	367.8	390.8	400.6
Other	42.8	43.7	47.8
Total Assets	431.0	453.2	470.6
LIABILITIES ($mill.)			
Accts Payable	.4	.4	7.0
Debt Due	11.5	11.5	7.6
Other	12.3	11.7	12.1
Current Liab	24.2	23.6	26.7

LONG-TERM DEBT AND EQUITY as of 3/31/03

Total Debt $117.6 mill. Due in 5 Yrs. NA
LT Debt $110.0 mill.
Including Cap. Leases NA (41% of Cap'l)
Leases, Uncapitalized Annual rentals NA

Pension Liability None in '02 vs. None in '01

Pfd Stock None Pfd Div'd Paid None

Common Stock 3,045,147 shares (59% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: SJW Corp. operates as a holding company with two wholly owned subsidiaries: San Jose Water Co. and SJW Land Co. San Jose Water Co. is a public utility in the business of providing water service to a population of approximately 988,000 in an area comprising about 138 square miles in the metropolitan San Jose area. SJW Land Co. owns and operates parking facilities adjacent to the company's headquarters and the San Jose Arena. It also owns commercial buildings in San Jose and a 70% limited partnership interest in 444 West Santa Clara Street, L.P. SJW produces, purifies, and distributes water. The company's water supply is obtained from wells, surface run-off, or diversion and by purchases from the Santa Clara Valley Water District. Has 301 employees. Chairman: Drew Gibson. Inc.: CA. Address: 374 West Santa Clara Street, San Jose, CA 95196. Tel.: 408 279-7800. Internet: http://www.sjwater.com.

A.Z.

August 1, 2003

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 6/30/2003

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
12.41%	11.18%	8.99%	-21.94%	67.60%

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The Natural Gas Distribution group has fallen 39 notches in Timeliness to 84 (of 98) in the past six months. The large pullback should not come as a great surprise. The main feature of gas utilities is their yield, *not* price performance or capital appreciation potential. The industry was ranked considerably higher earlier in the year due to macroeconomic factors that have since subsided somewhat. Stock market weakness and uncertainties created by war in Iraq drew an array of investors toward stable, dividend-paying gas stocks. Too, strong gas demand last winter for heating purposes owing to colder-than-normal weather increased the attraction of these shares. But with the close of the winter heating season in the United States, and the end of large-scale military operations in Iraq, many investors once again began to search for greater total-return opportunities elsewhere.

INDUSTRY TIMELINESS: 84 (of 98)

Local Distribution Companies

Natural Gas Distribution has historically been a regulated industry. Gas utilities are natural monopolies at the local distribution level, since it is cheaper and more efficient for a single provider to supply gas to an individual state or region than for multiple companies to build competing networks. As a result, each area is serviced by a sole supplier, referred to as a local distribution company (LDC). These entities are regulated at the state level, with capped return-on-equity (ROE) potential, in order to keep them from using their monopolistic situation to overcharge gas customers. On the other hand, LDCs generating profits below their allowed ROE can petition regulators for gas rate increases or file to recover costs. For instance, many LDCs lost money in the winter of 2000-2001 when the price of gas they purchased soared to unprecedented levels, yet they had to distribute the gas to consumers at much lower fixed rates. Regulators allowed many utilities to recover these costs over a 3- to 5-year period. In short, regulation limits the potential profitability for LDCs, but also reduces volatility in their share prices.

Industry Change

Initially, gas utilities had exclusive rights to deliver gas and provide other gas services to specified regions, and were fully regulated by state public utility commissions. But the federal government began to open certain aspects of the business to competition in the 1980s. In 1992, the Federal Energy Regulatory Commission instituted *Order 636*, which required pipeline operators to unbundle certain transportation and storage services, along with guaranteeing gas marketers with access to their distribution networks. Meanwhile, this enabled LDCs to engage in nonregulated activities outside of their regulated distribution operations. To varying degrees, LDCs today are also involved in exploration and production, gathering and processing, storage, energy trading, gas marketing, and even some power generation and telecommunications.

Current Operating Conditions

In general, gas utilities generated strong earnings in the first two calendar quarters of 2003. Distribution operations benefited from colder-than-normal weather last winter and spring, which increased gas volume. Many utilities have also enjoyed profits in their nonregulated businesses, as high commodity prices have boosted profits for gas marketing and E&P operations. Earnings from utilities are likely to be lower in the second half of the year, however. Gas distribution profits will be lower as a decline in natural gas demand for heating purposes is imminent due to seasonal conditions, while nonregulated earnings may trend downward owing to lower gas prices. Also, LDCs are currently undergoing pressure from higher operating costs, including greater pension expense and a rise in medical and property insurance premiums. LDCs are also experiencing increased bad-debt costs, following last winter's colder temperatures and the accompanying higher gas bills charged to customers and collection difficulties.

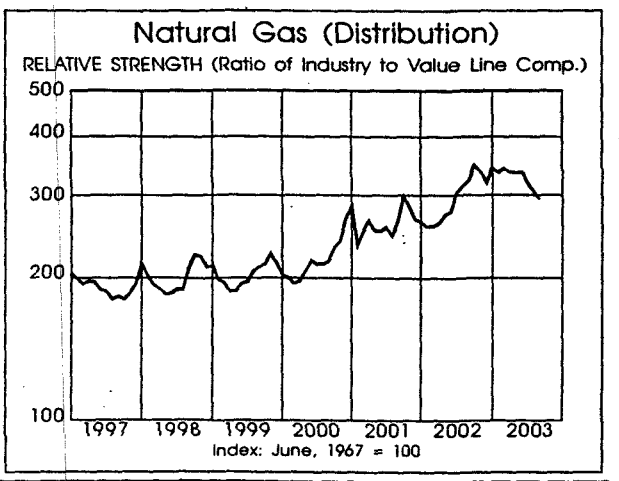
Investment Advice

The solid dividend yields and stable share prices of these stocks cater to income investors with low risk tolerance within the equity universe. It is noteworthy, however, that the business profile of gas utilities is changing as they expand into unregulated areas. Investors should consider how much exposure a company has to nonregulated activities before making an investment decision here. Unregulated operations usually add more volatility to the share price. Also, a company moving outside the distribution business will be less likely to increase dividends over time.

Michael P. Maloney

Composite Statistics: Natural Gas (Distribution)

1999	2000	2001	2002	2003	2004		06-08
16271	20717	29530	24180	*37500*	*39000*	Revenues ($mill)	*44000*
995.5	1140.0	1162.1	1312.5	*1500*	*1650*	Net Profit ($mill)	*2000*
35.2%	37.1%	38.8%	34.9%	*38.0%*	*38.0%*	Income Tax Rate	*38.0%*
6.1%	5.5%	3.9%	5.4%	*4.0%*	*4.2%*	Net Profit Margin	*4.5%*
47.4%	53.5%	57.1%	57.7%	*52.0%*	*52.0%*	Long-Term Debt Ratio	*50.0%*
50.7%	45.0%	41.8%	41.6%	*44.0%*	*44.0%*	Common Equity Ratio	*45.0%*
18859	22691	25969	26899	*32000*	*35000*	Total Capital ($mill)	*37500*
20877	24213	26113	27503	*33000*	*36000*	Net Plant ($mill)	*38500*
7.0%	6.6%	6.2%	6.5%	*6.5%*	*4.5%*	Return on Total Cap'l	*6.0%*
10.0%	10.8%	10.4%	11.5%	*11.0%*	*10.5%*	Return on Shr. Equity	*11.5%*
10.0%	10.9%	10.6%	11.6%	*11.5%*	*11.0%*	Return on Com Equity	*11.5%*
1.5%	3.0%	2.9%	4.0%	*4.0%*	*4.5%*	Retained to Com Eq	*5.0%*
85%	73%	73%	66%	*65%*	*63%*	All Div'ds to Net Prof	*55%*
14.3	16.6	14.8	12.6	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.0*
.93	.85	.81	.94			Relative P/E Ratio	*.85*
5.0%	4.4%	4.4%	6.3%			Avg Ann'l Yield	4.3%
271%	274%	247%	240%	*235%*	*230%*	Fixed Charge Coverage	*225%*



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AGL RESOURCES NYSE-ATG

RECENT PRICE 28.08 | P/E RATIO 14.3 (Trailing: 14.1 Median: 14.0) | RELATIVE P/E RATIO 0.81 | DIV'D YLD 4.0% | VALUE LINE 459

TIMELINESS 3 Raised 5/10/02
SAFETY 2 New 7/27/90
TECHNICAL 3 Lowered 4/4/03
BETA .75 (1.00 = Market)

2006-08 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+40%)	12%
Low	30	(+5%)	6%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	2	0
to Sell	0	0	0	0	1	0	0	0	0

Institutional Decisions

	4Q2002	1Q2003	2Q2003
to Buy	98	103	95
to Sell	45	50	77
Hld's(000)	28832	34881	35689

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	© VALUE LINE PUB., INC.	06-08
High:	19.5	21.3	19.4	20.0	22.0	21.6	23.4	23.4	23.2	24.5	25.0	28.5								Target Price Range 2006 | 2007 | 2008
Low:	15.1	17.0	14.6	14.9	17.1	17.8	17.7	15.6	15.5	19.0	17.3	21.9								
	26.24	22.97	21.63	22.58	20.26	20.43	22.73	23.59	19.32	21.91	22.75	23.36	18.71	11.25	19.04	15.32	*15.35*	*16.15*	Revenues per sh [A]	*18.45*
	1.84	1.90	1.93	2.04	2.07	2.31	2.25	2.24	2.33	2.49	2.42	2.65	2.29	2.86	3.31	3.39	*3.45*	*3.70*	"Cash Flow" per sh	*4.05*
	1.02	1.13	.95	1.01	1.04	1.13	1.08	1.17	1.33	1.37	1.37	1.41	.91	1.29	1.50	1.82	*2.00*	*2.10*	Earnings per sh [A B]	*2.25*
	.80	.88	.94	.98	1.02	1.03	1.04	1.04	1.04	1.06	1.08	1.08	1.08	1.08	1.08	1.08	*1.11*	*1.12*	Div'ds Decl'd per sh [C]	*1.12*
	3.59	2.86	2.65	2.73	2.95	2.74	2.49	2.37	2.17	2.37	2.59	2.05	2.51	2.92	2.83	3.30	*2.70*	*2.70*	Cap'l Spending per sh	*2.60*
	7.89	8.72	8.83	8.97	9.42	9.70	9.90	10.19	10.12	10.56	10.99	11.42	11.59	11.50	12.19	12.52	*14.55*	*15.90*	Book Value per sh	*19.50*
	37.48	42.47	43.40	44.32	47.57	48.69	49.72	50.86	55.02	55.70	56.60	57.30	57.10	54.00	55.10	56.70	*63.50*	*63.50*	Common Shs Outst'g [D]	*65.00*
	11.5	11.1	13.7	14.2	15.3	15.5	17.9	15.1	12.6	13.8	14.7	13.9	21.4	13.6	14.6	12.5	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*15.0*
	.77	.92	1.04	1.05	.98	.94	1.06	.99	.84	.86	.85	.72	1.22	.88	.75	.68			Relative P/E Ratio	*1.00*
	6.8%	7.1%	7.2%	6.8%	6.4%	5.9%	5.4%	5.9%	6.2%	5.6%	5.4%	5.5%	5.5%	6.2%	4.9%	4.7%			Avg Ann'l Div'd Yield	*3.3%*
	1130.3	1199.9	1063.0	1220.2	1287.6	1338.6	1068.6	607.4	1049.3	868.9	*975*	*1025*	Revenues ($mill) [A]	*1200*
	57.5	63.2	74.3	75.6	76.6	80.6	52.1	71.1	82.3	103.0	*125*	*135*	Net Profit ($mill)	*150*
	32.9%	35.2%	36.9%	38.6%	37.9%	32.5%	33.1%	34.3%	40.7%	36.0%	*36.0%*	*36.0%*	Income Tax Rate	*36.0%*
	5.1%	5.3%	7.0%	6.2%	5.9%	6.0%	4.9%	11.7%	7.8%	11.9%	*12.6%*	*13.0%*	Net Profit Margin	*12.3%*
	40.5%	49.0%	47.4%	46.2%	48.7%	47.5%	45.3%	45.9%	61.3%	58.3%	*50.0%*	*48.0%*	Long-Term Debt Ratio	*48.0%*
	53.1%	45.8%	47.6%	48.9%	45.9%	47.1%	49.2%	48.3%	38.7%	41.7%	*50.0%*	*52.0%*	Common Equity Ratio	*52.0%*
	925.7	1131.5	1170.3	1201.3	1356.4	1388.4	1345.8	1286.2	1736.3	1704.3	*1850*	*1935*	Total Capital ($mill)	*2440*
	1281.3	1297.4	1350.3	1415.4	1496.6	1534.0	1598.9	1637.5	2058.9	2194.2	*2400*	*2600*	Net Plant ($mill)	*2900*
	8.6%	7.5%	8.2%	8.0%	7.3%	7.6%	5.7%	7.4%	6.5%	8.1%	*7.0%*	*7.0%*	Return on Total Cap'l	*6.0%*
	10.4%	11.0%	12.1%	11.7%	11.0%	11.1%	7.1%	10.2%	12.3%	14.5%	*13.5%*	*13.0%*	Return on Shr. Equity	*11.5%*
	10.8%	11.3%	12.5%	12.1%	11.3%	12.3%	7.9%	11.5%	12.3%	14.5%	*13.5%*	*13.0%*	Return on Com Equity	*11.5%*
	.4%	3.0%	4.6%	3.8%	3.2%	4.4%	NMF	3.2%	4.2%	7.0%	*5.5%*	*6.0%*	Retained to Com Eq	*6.0%*
	96%	75%	66%	71%	74%	64%	101%	72%	65%	52%	*58%*	*53%*	All Div'ds to Net Prof	*49%*

% TOT. RETURN 8/03

	THIS STOCK	VL ARITH. INDEX
1 yr.	26.7	30.9
3 yr.	69.3	15.9
5 yr.	85.7	77.9

CAPITAL STRUCTURE as of 6/30/03
Total Debt 1167.9 *mill.* **Due in 5 Yrs** 504.1 mill.
LT Debt $925.1 mill. LT Interest $60.0 mill.
(Inc. $228.3 million in trust-preferred securities)
(Total interest coverage: 2.9x)
Leases, Uncapitalized Annual rentals $29.1 mill.
Pension Assets-12/02 $207.8 mill. **Oblig.** $290 *mill.*
Pfd Stock None

Common Stock 63,731,156 shs.
MARKET CAP: $1.8 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2001	2002	6/30/03
Cash Assets	2.8	8.4	3.3
Other	214.6	578.0	513.4
Current Assets	217.4	586.4	516.7
Accts Payable	82.4	91.1	387.1
Debt Due	348.4	418.6	242.8
Other	155.8	506.1	262.6
Current Liab.	586.6	1015.8	892.5
Fix. Chg. Cov.	241%	242%	*245%*

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	-3.0%	-6.5%	*3.0%*
"Cash Flow"	4.0%	5.5%	*4.5%*
Earnings	4.0%	2.5%	*8.0%*
Dividends	0.5%	0.5%	*Nil*
Book Value	2.5%	2.5%	*6.0%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) [A] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	182.3	160.1	131.8	133.2	607.4
2001	294.8	350.6	175.7	228.2	1049.3
	Mar.31	**Jun.30**	**Sep.30**	**Dec.31**	
2002	269.3	159.2	190.7	249.7	868.9
2003	351.4	186.6	*165*	*272*	*975*
2004	*330*	*220*	*180*	*295*	*1025*

Fiscal Year Ends	EARNINGS PER SHARE [A B] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	.30	.41	.26	.32	1.29
2001	.41	.83	.17	.09	1.50
	Mar.31	**Jun.30**	**Sep.30**	**Dec.31**	
2002	.89	.21	.17	.55	1.82
2003	.98	.29	*.25*	*.48*	*2.00*
2004	*.95*	*.35*	*.25*	*.55*	*2.10*

Calendar	QUARTERLY DIVIDENDS PAID [C] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.27	.27	.27	.27	1.08
2000	.27	.27	.27	.27	1.08
2001	.27	.27	.27	.27	1.08
2002	.27	.27	.27	.27	1.08
2003	.27	.28	.28		

BUSINESS: AGL Resources, Inc. is a public utility holding company. Its distribution subsidiaries is Atlanta Gas Light, Chattanooga Gas, and Virginia Natural Gas. The utilities have around 2 million customers in Georgia, primarily Atlanta, Virginia, and in southern Tennessee. Also engaged in nonregulated natural gas marketing and other, allied services. Also wholesales and retails propane. Nonregulated subsidiaries: Georgia Natural Gas Services markets natural gas at retail. Acquired Virginia Natural Gas, 10/00. Sold *Utilipro*, 3/01. Officers/directors own 1.5% of outstanding common shares (3/03 Proxy). President & CEO: Paula Rospot. Incorporated: Georgia. Address: 303 Peachtree St., N.E., Atlanta, GA 30308. Telephone: 404-584-9470. Internet: www.agiresources.com.

AGL Resources' share price is reaching new highs, on a split-adjusted basis. Too, the recent price of $28 marked a 7% advance from our previous report in June. The share-price advance has been driven by sound company fundamentals. On top of dividend tax cuts and the low interest-rate environment, which make income stocks more attractive, AGL raised the quarterly dividend by a penny in the second quarter. Meanwhile, earnings have been strong, as share net of $0.29 last quarter was ahead of our expectations and 38% ahead of the year-ago figure.

We are raising both our share-net estimates for this year and next by a dime. We now look for EPS to be $2.00 and $2.10 in 2003 and 2004, respectively. The changes come on the heels of better-than-anticipated performance in the June quarter, particularly from nonregulated activities. AGL managed to generate EBIT of $6.6 million from the Energy Investments unit, and EBIT of $0.3 million from the Wholesale Services division, compared to multimillion dollar losses in both units a year ago. These positive trends should continue as a result of higher margins and greater physical volume. Improvements from utility operations are likely to be less profound in the near term, however, as customer growth is offset somewhat by increased bad debt expense.

AGL Resources has refinanced some of its existing debt, in order to take advantage of low interest rates. It recently issued $225 million of senior notes at 4.45%, compared to the average rate on the company's debt of 7.2%. Net proceeds of the offering were used to pay down approximately $110 million in short-term obligations and $65 million in higher-coupon long-term debt. The remainder will be used for general corporate purposes. Also, the company completed a $100 million fixed-to-floating interest-rate swap, which brings AGL near to its targeted debt mix of 70% fixed- and 30% floating-rate debt.

This issue is a good-quality income stock. It offers an adequate dividend yield and has provided share-price stability over the past decade. Investors should note that the run-up in price this year, however, makes the stock vulnerable in the event of any operational disappointments.

Michael P. Maloney *September 19, 2003*

(A) Fiscal year ends December 31st. Ended September 30th prior to 2002. (B) Diluted earnings per share. Next earnings report due late Oct. Excl. nonrecurring gains (losses): '88, $0.15; '95, d$0.83; '99, $0.39; '00, $0.13; '01, $0.13. (C) Dividends historically paid early March, June, Sept, and Dec. ■ Div'd reinvest. plan available. (D) In millions, adjusted for stock split.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	30
Earnings Predictability	65

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ATMOS ENERGY CORP. NYSE-ATO

RECENT PRICE 24.36 | P/E RATIO 14.7 (Trailing: 15.9 / Median: 16.0) | RELATIVE P/E RATIO 0.83 | DIV'D YLD 5.0% | VALUE LINE 460

TIMELINESS 4 Lowered 9/19/03
SAFETY 3 Lowered 6/23/00
TECHNICAL 3 Lowered 4/4/03
BETA .65 (1.00 = Market)

2006-08 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	35	(+45%)	14%
Low	25	(+5%)	6%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	1	0
to Sell	1	0	1	1	0	0	0	0	0

Institutional Decisions

	4Q2002	1Q2003	2Q2003
to Buy	60	65	72
to Sell	36	40	37
Hld's(000)	16646	16559	16164

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	VALUE LINE PUB., INC.	06-08
High:	15.9	21.2	20.3	23.0	31.0	30.5	32.3	33.0	26.3	25.8	24.5	25.5		
Low:	12.7	15.2	15.9	16.1	20.9	22.1	24.8	19.6	14.3	19.5	17.6	20.8		
	31.94	32.67	28.08	30.19	30.59	27.90	22.09	26.61	35.36	22.82	*30.70*	*28.90*	Revenues per sh [A]	*28.15*
	2.39	2.19	2.55	2.80	2.85	3.38	2.62	3.01	3.03	3.39	*3.35*	*3.40*	"Cash Flow" per sh	*4.10*
	1.19	.97	1.22	1.51	1.34	1.84	.81	1.03	1.47	1.45	*1.70*	*1.65*	Earnings per sh [A B]	*2.20*
	.86	.88	.92	.96	1.01	1.06	1.10	1.14	1.16	1.18	*1.20*	*1.22*	Div'ds Decl'd per sh [C]	*1.32*
	2.67	3.29	4.05	4.84	4.13	4.44	3.53	2.36	2.77	3.17	*3.00*	*3.25*	Cap'l Spending per sh	*3.55*
	9.64	9.78	10.20	10.75	11.04	12.21	12.09	12.28	14.31	13.75	*16.20*	*15.95*	Book Value per sh	*15.60*
	14.38	15.30	15.52	16.02	29.64	30.40	31.25	31.95	40.79	41.68	*51.50*	*54.00*	Common Shs Outst'g [D]	*65.00*
	14.7	19.2	15.0	15.1	17.9	15.4	33.0	18.9	15.6	15.2	*Bold figures are*		Avg Ann'l P/E Ratio	*13.5*
	.87	1.26	1.00	.95	1.03	.80	1.88	1.23	.80	.80	*Value Line*		Relative P/E Ratio	*.90*
	4.9%	4.7%	5.0%	4.2%	4.2%	3.7%	4.1%	5.9%	5.1%	5.4%	*estimates*		Avg Ann'l Div'd Yield	*4.5%*
	459.4	499.8	435.8	483.7	906.8	848.2	690.2	850.2	1442.3	950.8	*1580*	*1560*	Revenues ($mill) [A]	*1830*
	17.0	14.7	18.8	23.9	39.2	55.3	25.0	32.2	56.1	59.7	*85.0*	*85.0*	Net Profit ($mill)	*140*
	37.7%	35.5%	33.8%	35.7%	37.5%	36.5%	35.0%	36.1%	37.3%	37.1%	*37.0%*	*37.0%*	Income Tax Rate	*37.0%*
	3.7%	2.9%	4.3%	5.0%	4.3%	6.5%	3.6%	3.8%	3.9%	6.3%	*5.4%*	*5.4%*	Net Profit Margin	*7.7%*
	43.3%	48.0%	45.3%	41.5%	48.1%	51.8%	50.0%	48.1%	54.3%	53.9%	*51.0%*	*50.0%*	Long-Term Debt Ratio	*50.0%*
	56.7%	52.0%	54.7%	58.5%	51.9%	48.2%	50.0%	51.9%	45.7%	46.1%	*49.0%*	*50.0%*	Common Equity Ratio	*50.0%*
	244.6	287.9	289.6	294.6	630.2	769.7	755.1	755.7	1276.3	1243.7	*1705*	*1730*	Total Capital ($mill)	*2050*
	299.3	327.4	363.3	413.6	849.1	917.9	965.8	982.3	1335.4	1300.3	*1505*	*1550*	Net Plant ($mill)	*1900*
	9.2%	7.2%	8.9%	10.6%	8.3%	9.0%	5.1%	6.5%	5.9%	6.8%	*6.0%*	*6.0%*	Return on Total Cap'l	*8.0%*
	12.3%	9.8%	11.9%	13.9%	12.0%	14.9%	6.6%	8.2%	9.6%	10.4%	*10.5%*	*10.5%*	Return on Shr. Equity	*14.0%*
	12.3%	9.8%	11.9%	13.9%	12.0%	14.9%	6.6%	8.2%	9.6%	10.4%	*10.5%*	*10.5%*	Return on Com Equity	*14.0%*
	5.6%	1.3%	2.9%	5.1%	3.9%	6.3%	NMF	NMF	2.1%	1.9%	*3.0%*	*3.0%*	Retained to Com Eq	*5.5%*
	54%	86%	76%	64%	67%	58%	NMF	112%	79%	82%	*71%*	*74%*	All Div'ds to Net Prof	*60%*

% TOT. RETURN 8/03

	THIS STOCK	VL ARITH. INDEX
1 yr	19.6	30.9
3 yr	36.9	15.9
5 yr	0.9	77.9

Target Price Range 2006 . 2007 . 2008

Atmos Energy's history dates back to 1906 in the Texas Panhandle. Over the years, through various mergers, it became part of Pioneer Corporation, and, in 1981, Pioneer named its gas distribution division Energas. In 1983, Pioneer organized Energas as a separate subsidiary and distributed the outstanding shares of Energas to Pioneer shareholders. Energas changed its name to Atmos in 1988. Atmos acquired Trans Louisiana Gas in 1986, Western Kentucky Gas Utility in 1987, Greeley Gas in 1993, United Cities Gas in 1997, and others.

CAPITAL STRUCTURE as of 6/30/03
Total Debt $874.7 mill. **Due in 5 Yrs** $230.0 mill.
LT Debt $864.3 mill. **LT Interest** $50.0 mill.
(LT interest earned: 2.9x; total interest coverage: 2.6x) (51% of Cap'l)
Leases, Uncapitalized Annual rentals $9.6 mill.
Pfd Stock None
Pension Assets-9/02 $209.9 mill. **Oblig.** $226.2 mill.
Common Stock 51,279,963 shs.
as of 8/1/03
MARKET CAP: $1.2 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2001	2002	6/30/03
Cash Assets	15.3	46.8	17.3
Other	409.0	283.2	365.7
Current Assets	424.3	330.0	383.0
Accts Payable	84.5	135.6	203.6
Debt Due	221.9	167.8	10.4
Other	204.6	159.7	168.1
Current Liab.	511.0	463.1	382.1
Fix. Chg. Cov.	356%	259%	275%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	-2.0%	-1.0%	*Nil*
"Cash Flow"	2.0%	3.0%	*4.5%*
Earnings	3.5%	-.5%	*9.0%*
Dividends	4.0%	4.0%	*2.0%*
Book Value	4.0%	5.0%	*2.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) [A] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	224.5	314.2	152.4	159.1	850.2
2001	442.8	675.1	164.3	160.1	1442.3
2002	271.3	379.5	161.8	138.2	950.8
2003	401.5	700.4	247.8	*230.3*	*1580*
2004	*415*	*685*	*250*	*210*	*1560*

Fiscal Year Ends	EARNINGS PER SHARE [A B] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	.46	.94	d.14	d.23	1.03
2001	.70	1.13	d.08	d.19	[G]1.47
2002	.50	1.01	.08	d.14	1.45
2003	.60	1.24	--	*d.14*	*1.70*
2004	*.63*	*1.17*	*.03*	*d.18*	*1.65*

Cal-endar	QUARTERLY DIVIDENDS PAID [C] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.275	.275	.275	.285	1.11
2000	.285	.285	.285	.29	1.15
2001	.29	.29	.29	.295	1.17
2002	.295	.295	.295	30	1.19
2003	.30	.30	.30		

BUSINESS: Atmos Energy Corporation is engaged primarily in the distribution and sale of natural gas through five regulated natural gas utility operations: Louisiana Division (370,012 utility meters in service in 2002), Texas Division (313,340), Mid-States Division (310,630), Colorado-Kansas Division (216,980), and Kentucky Division (178,379). Combined 2002 sales volumes: 145 MMcf. Breakdown: 53%, residential; 25%, commercial; 22%, industrial and other. '02 depreciation rate 3.8%. Has 2,340 employees. Officers and directors own approx. 4.1% of common stock; ESOP, 5.8% (12/02 Proxy). Chairman, CEO, & President: Robert Best. Incorporated: Texas. Address: P.O. Box 650205, Dallas, TX 75265. Telephone: 972-934-9227. Internet: www.atmosenergy.com.

It appears that Atmos Energy's share net will jump to around $1.70 in fiscal 2003, ends September 30th. (Note that this estimate excludes a $0.17-a-share charge due to an accounting change.) The utility operations are being helped, in part, by last year's purchase of Mississippi Valley Gas, which added 260,000 customers. These segments are also benefiting from higher base charges (mainly in Louisiana), due to an annual rate stabilization filing that became effective last November. But the non-utility units have generated lower income of late, stemming partly from high gas price volatility.

Gas supply hedges should protect results greatly against possible sharp increases in natural gas prices during the 2003-2004 heating season. Management is covering between 50% and 60% of Atmos' anticipated flowing gas requirements through storage and financial contracts at an average cost of about $5.10 per Mcf, compared to $3.14 per Mcf last year.

The company recently sold four million shares of common stock in a public offering for nearly $97 million in net proceeds. An additional 100,000 shares were sold for $2.4 million in net proceeds when the underwriters exercised their overallotment option. The cash is being used partly to decrease short-term debt and to fund Atmos' pension plan. The equity issuance modestly diluted share earnings.

Atmos Energy is one of the more aggressively managed natural gas utilities in the *Value Line* universe, as it successfully completed several major acquisitions over the past 17 years. The company will undoubtedly stick to its winning formula of buying less-efficient utilities and improving their profitability through cost cutting, rate relief, and aggressive marketing efforts. (Our presentation doesn't include future purchases, though, due to the many uncertainties involved with that strategy.)

Income-oriented accounts may be drawn to the unfavorably ranked equity's current dividend, which increased at a steady rate in previous years. We anticipate additional hikes in the payout, too, as supported by our favorable projections.

Frederick L. Harris, III September 19, 2003

Company's Financial Strength	B+
Stock's Price Stability	95
Price Growth Persistence	25
Earnings Predictability	55

(A) Fiscal year ends Sept. 30th. (B) Diluted shrs. Excl. nonrec. items: '97, d53c; '99, d23c; '00, 12c; Q2 '03, d17¢. Next egs. rpt. due early Nov. (C) Dividends historically paid in early March, June, Sept., and Dec. ■ Div. reinvestment plan. (3% discount). Direct stock purchase plan avail. (D) In millions, adjusted for stock splits. (E) Years prior to 1994 are not comparable due to acquisition using pooling of interest method. (F) ATO completed United Cities merger 7/97. (G) Qtrs don't add due to change in shrs out.

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LACLEDE GROUP NYSE-LG

RECENT PRICE 27.56 | P/E RATIO 15.2 (Trailing: 15.6 / Median: 15.0) | RELATIVE P/E RATIO 0.86 | DIV'D YLD 4.9% | VALUE LINE 464

TIMELINESS 3 Raised 8-1-03
SAFETY 2 Raised 6-20-03
TECHNICAL 3 Lowered 2-14-03
BETA .65 (1.00 = Market)

2006-08 PROJECTIONS

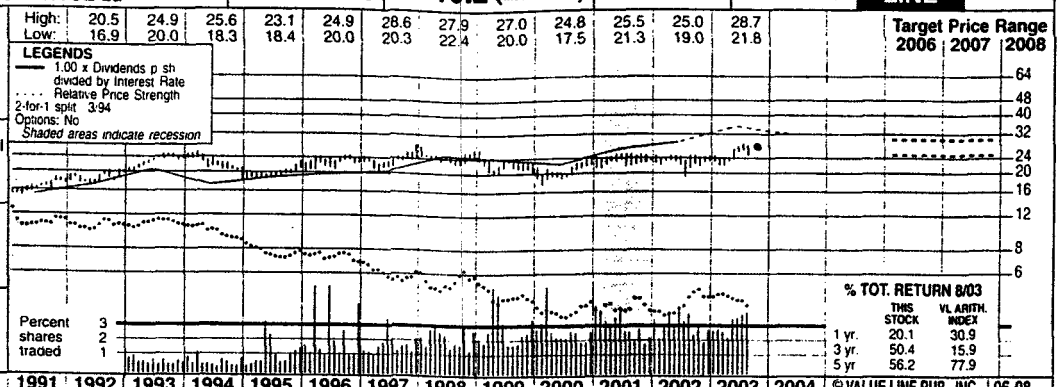
	Price	Gain	Ann'l Total Return
High	30	(+10%)	6%
Low	25	(-10%)	2%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	1	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2002	1Q2003	2Q2003
to Buy	38	33	44
to Sell	27	37	32
Hld's(000)	4704	4527	4619



1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	© VALUE LINE PUB., INC.	06-08
28.38	30.82	31.57	30.21	28.10	26.83	32.33	33.43	24.79	31.03	34.33	31.04	26.04	29.99	53.08	39.84	*53.65*	*53.90*	Revenues per sh	*55.80*
2.44	2.51	2.47	2.13	2.37	2.32	2.81	2.65	2.55	3.29	3.32	3.02	2.56	2.68	3.00	2.56	*3.05*	*3.15*	"Cash Flow" per sh	*3.30*
1.44	1.57	1.45	1.08	1.28	1.17	1.61	1.42	1.27	1.87	1.84	1.58	1.47	1.37	1.61	1.18	*1.80*	*1.85*	Earnings per sh [A B]	*1.90*
1.06	1.10	1.15	1.18	1.20	1.20	1.22	1.22	1.24	1.26	1.30	1.32	1.34	1.34	1.34	1.34	*1.34*	*1.34*	Div'ds Decl'd per sh [C]	*1.37*
1.53	1.92	1.82	1.87	2.46	2.87	2.62	2.50	2.63	2.35	2.44	2.68	2.58	2.77	2.51	2.80	*2.80*	*2.80*	Cap'l Spending per sh	*2.80*
10.98	11.44	11.74	11.75	11.83	11.79	12.19	12.44	13.05	13.72	14.26	14.57	14.96	14.99	15.26	15.07	*16.00*	*16.50*	Book Value per sh [D]	*18.15*
15.74	15.68	15.59	15.59	15.59	15.59	15.59	15.67	17.42	17.56	17.56	17.63	18.88	18.88	18.88	18.96	*19.00*	*19.00*	Common Shs Outst'g [E]	*19.00*
11.0	9.2	10.3	14.6	12.5	15.8	13.5	16.4	15.5	11.9	12.5	15.5	15.8	14.9	14.5	20.0	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*14.0*
.74	.76	.78	1.08	.80	.96	.80	1.08	1.04	.75	.72	.81	.90	.97	.74	1.05			Relative P/E Ratio	*.95*
6.7%	7.6%	7.7%	7.5%	7.5%	6.5%	5.6%	5.3%	6.3%	5.6%	5.6%	5.4%	5.8%	6.6%	5.7%	5.7%			Avg Ann'l Div'd Yield	*5.2%*
504.0	523.9	431.9	544.8	602.8	547.2	491.6	566.1	1002.1	755.2	*1020*	*1025*	Revenues ($mill) [A]	*1060*
25.2	22.2	20.9	32.8	32.5	27.9	26.9	26.0	30.5	22.4	*34.2*	*35.0*	Net Profit ($mill)	*36.0*
37.3%	36.0%	32.1%	35.9%	36.1%	35.6%	35.5%	35.2%	32.7%	35.4%	*35.0%*	*35.0%*	Income Tax Rate	*35.0%*
5.0%	4.2%	4.8%	6.0%	5.4%	5.1%	5.5%	4.6%	3.0%	3.0%	*3.4%*	*3.4%*	Net Profit Margin	*3.4%*
46.3%	43.9%	40.2%	42.5%	38.0%	40.9%	41.8%	45.2%	49.5%	47.5%	*50.0%*	*49.0%*	Long-Term Debt Ratio	*47.0%*
53.1%	55.5%	59.3%	57.1%	61.6%	58.6%	57.8%	54.5%	50.2%	52.3%	*50.0%*	*51.0%*	Common Equity Ratio	*53.0%*
357.6	351.1	383.5	422.2	406.8	438.0	488.6	519.2	574.1	546.6	*610*	*620*	Total Capital ($mill)	*650*
390.8	411.7	434.3	452.2	467.6	490.6	519.4	575.4	602.5	594.4	*625*	*650*	Net Plant ($mill)	*730*
9.1%	8.1%	7.1%	9.4%	9.7%	8.1%	7.1%	6.7%	6.9%	6.0%	*7.5%*	*7.5%*	Return on Total Cap'l	*7.5%*
13.1%	11.3%	9.1%	13.5%	12.9%	10.8%	9.5%	9.1%	10.5%	7.8%	*11.5%*	*11.0%*	Return on Shr. Equity	*10.5%*
13.2%	11.3%	9.2%	13.6%	12.9%	10.8%	9.5%	9.1%	10.5%	7.8%	*11.5%*	*11.0%*	Return on Com Equity	*10.5%*
3.3%	1.6%	.4%	4.5%	3.9%	1.8%	1.0%	.2%	1.8%	NMF	*3.0%*	*3.0%*	Retained to Com Eq	*3.0%*
75%	86%	96%	67%	70%	83%	89%	98%	83%	113%	*75%*	*75%*	All Div'ds to Net Prof	*72%*

CAPITAL STRUCTURE as of 6/30/03
Total Debt $433.5 mill. **Due in 5 Yrs** $240.0 mill.
LT Debt $304.6 mill. **LT Interest** $24.3 mill.
(Total interest coverage: 2.0x)(LT Debt incl. $45 million in 7.7% obligated, mandatorily redeemable preferred securities of subsidiary trust.)
(50% of Cap'l)
Leases, Uncapitalized Annual rentals $1.3 mill.
Pension Assets-9/02 $12.1 mill. **Oblig.** $50.0 mill.
Pfd Stock $1.3 mill. **Pfd Div'd** $.07 mill.

Common Stock 19,078,853 shs.
as of 7/25/03
MARKET CAP: $525 million (Small Cap)

CURRENT POSITION ($MILL.)	2001	2002	6/30/03
Cash Assets	3.2	12.9	7.3
Other	187.3	209.5	205.1
Current Assets	190.5	222.4	212.4
Accts Payable	32.1	45.7	63.2
Debt Due	117.1	186.7	128.9
Other	68.5	104.4	70.9
Current Liab.	217.7	336.8	263.0
Fix. Chg. Cov.	253%	230%	*255%*

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	3.5%	6.5%	5.5%
"Cash Flow"	2.0%	-2.0%	*3.0%*
Earnings	1.5%	-3.5%	*5.5%*
Dividends	1.0%	1.0%	*.5%*
Book Value	2.5%	2.0%	*3.0%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) [A] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	151.4	238.3	95.3	81.1	566.1
2001	345.1	442.7	122.9	91.4	1002.1
2002	194.6	287.5	147.3	125.8	755.2
2003	280.0	422.2	186.6	*131.2*	*1020*
2004	*285*	*425*	*180*	*135*	*1025*

Fiscal Year Ends	EARNINGS PER SHARE [A B] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	.51	1.03	.02	d.19	1.37
2001	.98	1.10	d.20	d.27	1.61
2002	.41	1.10	d.05	d.28	1.18
2003	.80	1.14	.11	*d.25*	*1.80*
2004	*.80*	*1.15*	*.15*	*d.25*	*1.85*

Calendar	QUARTERLY DIVIDENDS PAID [C] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.335	.335	.335	.335	1.34
2000	.335	.335	.335	.335	1.34
2001	.335	.335	.335	.335	1.34
2002	.335	.335	.335	.335	1.34
2003	.335	.335			

BUSINESS: Laclede Group, Inc., is a holding company for Laclede Gas, which distributes natural gas in eastern Missouri (population, 2 million), including the city of St. Louis, St. Louis County, and parts of 8 other counties. Had 628,638 customers at 9/02. Purchased SM&P for $43 million (1/02). Therms sold and transported in fiscal '02: 1.06 mill. Revenue mix: residential, 65%; commercial and industrial, 24%; transportation, 2%; other, 9%. Purchased gas obtained from various suppliers accounts for 59% of revenues. Has about 3,950 empls.; 9,715 common stockholders. Off. & dir. own 6.45% of common shs. (1/03 Proxy). Chrmn., CEO, and Pres.: D.H. Yaeger. Inc.: MO. Address: 720 Olive Street, St. Louis, MO 63101. Tel.: 314-342-0500. Internet: www.ladedegas.com.

Laclede posted stronger-than-expected results in its third fiscal quarter, (ended June 30th) earning $0.11 per share, versus a loss of $0.05 in 2002. One of the other primary sources of the strength was the new rate design that the company implemented in November, 2002. The new plan incorporates a weather mitigation clause which allowed the company to recoup more of its fixed distribution costs in the third quarter. The effect is a partial reduction in the seasonality of LG's earnings. Results were also aided by a rate increase, imposed at the same time as the new design, which helped to boost both earnings and revenues. Due to the shift in cost recovery, Laclede should be able to continue to generate a profit in the third quarter going forward. As a result of the unexpected profit during the period, we have raised our fiscal 2003 share-net estimate to $1.80.

The company's non-regulated division continues to send mixed signals. During the quarter, revenues at the Gas Marketing segment jumped more than 110% on increased sales and higher gas prices, while operating income leapt 130%. However, things are not so bright at the company's underground marking subsidiary. Due to the prior cancellation of contracts by two of its largest customers, revenues as well as operating income fell by approximately 30% year-over-year.

Management is still appealing a ruling by regulators that nearly $5 million in income from 2001 be overturned. Nevertheless, if the effort is unsuccessful, it should result in a charge of $0.26 per share.

Laclede shares have moved up one rank to 3 (Average) for year-ahead relative price performance. The stock, which had a strong run earlier in the year, when dividend-paying stocks were in favor, has largely held steady since our June report. Looking to the longer term, the issue is already well within our projected price range for 2006–2008. Although the shares don't offer attractive capital appreciation potential, income-oriented investors might find the stock appealing. Too, the dividend coverage has improved, although it hasn't reached a point where a hike in distribution is warranted.

Michael P. Gorman *September 19, 2003*

(A) Fiscal year ends Sept. 30th.
(B) Based on average shares outstanding thru. '97, then diluted. Next earnings report due late October.
(C) Dividends historically paid in early January, April, July, October. ■ Dividend reinvestment plan available.
(D) Incl. deferred charges. In '02: $190.7 mill., $10.09/sh.
(E) In millions. Adjusted for stock split.

Company's Financial Strength	B+
Stock's Price Stability	100
Price Growth Persistence	30
Earnings Predictability	60

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N.W. NAT'L GAS NYSE-NWN

RECENT PRICE 29.35 | P/E RATIO 15.7 (Trailing: 18.2) (Median: 13.0) | RELATIVE P/E RATIO 0.89 | DIV'D YLD 4.3% | VALUE LINE 468

TIMELINESS 4 Raised 8/8/03
SAFETY 2 New 7/27/90
TECHNICAL 2 Raised 9/19/03
BETA .60 (1.00 = Market)

2006-08 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(Nil)	5%
Low	25	(-15%)	1%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	1	0	0	1	0
Options	0	0	0	0	0	0	0	1	2
to Sell	0	0	0	0	0	0	0	1	2

Institutional Decisions

	4Q2002	1Q2003	2Q2003
to Buy	55	45	54
to Sell	52	55	48
Hld's(000)	10690	10395	9476

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	© VALUE LINE PUB., INC.	06-08
High:	22.7	25.8	24.3	22.8	25.9	31.4	30.8	27.9	27.5	26.8	30.7	29.9								
Low:	17.2	19.0	18.8	18.3	20.8	23.0	24.3	19.5	17.8	21.7	23.5	24.0								
	19.69	17.39	15.22	17.02	16.74	14.10	18.15	18.30	16.02	16.86	15.82	16.77	18.17	21.09	25.78	25.07	*23.25*	*23.45*	Revenues per sh	*29.50*
	2.38	2.79	2.85	3.22	2.57	3.25	3.74	3.50	3.41	3.86	3.72	3.24	3.72	3.68	3.86	3.65	*3.75*	*3.85*	"Cash Flow" per sh	*4.50*
	1.20	1.33	1.58	1.62	.67	.74	1.74	1.63	1.61	1.97	1.76	1.02	1.70	1.79	1.88	1.62	*1.70*	*1.85*	Earnings per sh [A]	*2.35*
	1.04	1.05	1.07	1.10	1.13	1.15	1.17	1.17	1.18	1.20	1.21	1.22	1.23	1.24	1.25	1.26	*1.27*	*1.28*	Div'ds Decl'd per sh [B]	*1.33*
	2.17	2.62	3.36	3.85	3.58	3.73	3.61	4.23	3.02	3.70	5.07	4.02	4.78	3.46	3.23	3.11	*3.85*	*3.00*	Cap'l Spending per sh	*3.50*
	10.92	11.25	12.04	12.61	12.23	12.41	13.08	13.63	14.55	15.37	16.02	16.59	17.12	17.93	18.56	18.88	*19.20*	*20.50*	Book Value per sh [C]	*23.20*
	15.69	15.96	17.14	17.41	17.68	19.46	19.77	20.13	22.24	22.56	22.86	24.85	25.09	25.23	25.23	25.59	*25.80*	*27.30*	Common Shs Outst'g [D]	*28.00*
	11.8	10.2	9.8	10.2	28.1	27.0	12.9	13.0	12.9	11.7	14.4	26.7	14.5	12.4	12.9	17.2	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*11.5*
	.79	.85	.74	.76	1.79	1.64	.76	.85	.86	.73	.83	1.39	.83	.81	.66	.94			Relative P/E Ratio	*.75*
	7.3%	7.7%	6.9%	6.7%	5.9%	5.7%	5.2%	5.5%	5.7%	5.2%	4.8%	4.5%	5.0%	5.6%	5.1%	4.5%			Avg Ann'l Div'd Yield	*4.9%*
							358.7	368.3	356.3	380.3	361.8	416.7	455.8	532.1	650.3	641.4	*600*	*640*	Revenues ($mill)	*825*
							37.7	35.5	38.1	46.8	43.1	27.3	44.9	47.8	50.2	43.8	*44.0*	*50.0*	Net Profit ($mill)	*65.0*
							37.0%	36.6%	36.8%	36.9%	32.9%	31.0%	35.4%	35.9%	35.4%	34.9%	*35.0%*	*35.0%*	Income Tax Rate	*35.0%*
							10.5%	9.6%	10.7%	12.3%	11.9%	6.6%	9.9%	9.0%	7.7%	6.8%	*7.3%*	*7.8%*	Net Profit Margin	*7.9%*
							47.5%	47.9%	43.5%	41.4%	46.0%	45.0%	46.0%	45.1%	43.0%	47.6%	*48.5%*	*48.0%*	Long-Term Debt Ratio	*49.5%*
							45.0%	45.1%	50.3%	52.8%	49.0%	50.6%	49.9%	50.9%	53.2%	51.5%	*50.5%*	*51.5%*	Common Equity Ratio	*50.0%*
							575.2	607.7	643.3	657.4	748.0	815.6	861.5	887.8	880.5	937.3	*975*	*1080*	Total Capital ($mill)	*1300*
							606.9	654.3	697.2	745.3	827.5	894.7	895.9	934.0	965.0	995.6	*1050*	*1120*	Net Plant ($mill)	*1325*
							8.5%	7.6%	7.7%	8.9%	7.4%	5.0%	6.8%	6.7%	6.9%	5.9%	*6.5%*	*6.5%*	Return on Total Cap'l	*7.0%*
							12.5%	11.2%	10.5%	12.1%	10.7%	6.1%	9.7%	9.8%	10.0%	8.9%	*9.0%*	*9.0%*	Return on Shr. Equity	*10.0%*
							13.2%	11.8%	10.9%	12.7%	11.0%	6.0%	9.9%	10.0%	10.2%	8.5%	*9.0%*	*9.0%*	Return on Com Equity	*10.0%*
							4.4%	3.3%	3.0%	5.0%	3.6%	NMF	2.8%	3.1%	3.5%	1.9%	*2.0%*	*2.5%*	Retained to Com Eq	*4.5%*
							70%	74%	74%	63%	70%	118%	74%	70%	67%	79%	*75%*	*70%*	All Div'ds to Net Prof	*58%*

% TOT. RETURN 8/03

	THIS STOCK	VL ARITH. INDEX
1 yr.	11.7	30.9
3 yr.	38.1	15.9
5 yr.	43.6	77.9

Target Price Range 2006 | 2007 | 2008

CAPITAL STRUCTURE as of 6/30/03
Total Debt $502.5 mill. Due in 5 Yrs $125.0 mill.
LT Debt $450.9 mill. LT Interest $32.0 mill.
Incl. $6.4 mill. 7¼% debs. due 3/1/12, each conv. into 50.25 com. shs. at $19.90.
(Total interest coverage: 3.1x)

Pension Assets-12/02 $143.2 mill. Oblig. $185.1 mill.

Pfd Stock $7.5 mill. Pfd Div'd $.6 mill.

Common Stock 25,738,408 shs.
MARKET CAP $750 million (Small Cap)

CURRENT POSITION ($MILL.)

	2001	2002	6/30/03
Cash Assets	10.4	7.3	24.1
Other	199.9	186.7	104.3
Current Assets	210.3	194.0	128.4
Accts Payable	70.7	74.4	55.3
Debt Due	148.3	89.8	51.6
Other	54.6	40.8	37.9
Current Liab.	273.6	205.0	144.8
Fx. Chg. Cov.	285%	296%	*300%*

ANNUAL RATES of change (per sh)

	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	4.0%	8.0%	*3.5%*
"Cash Flow"	2.0%	0.5%	*3.0%*
Earnings	5.5%	--	*5.0%*
Dividends	1.0%	1.0%	*1.0%*
Book Value	4.0%	4.0%	*4.0%*

QUARTERLY REVENUES ($ mill.)

Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2000	186.6	86.1	61.2	198.2	532.1
2001	217.3	118.2	78.4	236.4	650.3
2002	278.6	101.9	78.7	182.2	641.4
2003	206.5	117.5	*80.0*	*196.0*	*600*
2004	*230*	*120*	*82.0*	*208*	*640*

EARNINGS PER SHARE [A]

Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2000	1.20	.07	d.22	.74	1.79
2001	.99	.17	d.22	.94	1.88
2002	1.32	d.13	d.26	.69	1.62
2003	1.01	.17	*d.30*	*.82*	*1.70*
2004	*1.18*	*.15*	*d.30*	*.82*	*1.85*

QUARTERLY DIVIDENDS PAID [B] ■

Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.305	.305	.305	.31	1.23
2000	.31	.31	.31	.31	1.24
2001	.31	.31	.31	.315	1.25
2002	.315	.315	.315	.315	1.26
2003	.315	.315	.315		

BUSINESS: Northwest Natural Gas Co. (doing business as NW Natural) distributes natural gas at retail to 90 communities, 540,931 customers, in Oregon (96% of revs.) and in southwest Washington state. Principal cities served: Portland and Eugene, OR; Vancouver, WA. Service area population: 2.4 mill. (77% in OR). Company buys gas supply from Canadian and U.S. producers; has transportation rights on Northwest Pipeline sys. to bring gas to market. Owns local underground storage. Gas revs: resident'l & comm'l, 88%; ind., 9%; transport. and other, 3%. Employs 1,260. Has 10,359 com. shrhldrs. Insiders own about 1% of com. Chrmn: R.G. Reiten. CEO: M.S. Dodson. Inc.: OR. Addr.: 220 N.W. 2nd Ave., Portland, OR 97209. Tel.: 503-226-4211. Internet: www.nwnatural.com.

Northwest Natural is handling itself well in a local energy market that's expanding more slowly these days. This gas distributor still brings in new customers faster than the industry average. But the current growth pace of 3.0%-3.5% a year is far below the 5.5%-6.0% annual rate of new gas-line connections before 2001. The Pacific Northwest service area, which has become much more economically diverse since 1990, has fallen on harder times in recent years as manufacturing has been emerging slowly from recessionary depths. As a result, the utility is showing a fair degree of earnings drag. Management has been taking defensive actions to head off any serious earnings upset by holding the line on operating expenses and obtaining the lowest interest rates available to NWN on refinancings and on expanded borrowings. NWN has also persuaded regulators to revise its rate structure to allow it to compensate for some of the earnings shortfall. The efforts to date are protecting the dividend and should soon return the payout ratio to a more comfortable level.

Oregon has ordered a formal rate hike. New tariffs should gradually raise utility billings by 8% into early 2004. Though NWN's allowed return on common equity is reduced to 10.20% from 10.25% previously, the lowered benchmark is based on today's larger shareholder account. It should be attainable with the assist of state-ordered cost-saving incentives and as long as management is able to minimize borrowing costs. (The state will likely reset the allowable return to cover a steep rise in interest rates, though with the usual regulatory lag.) Importantly, NWN is now permitted weather normalization rate adjustments to make cash flow more predictable for planning capital spending and the associated financing. As it stands now, NWN will be permitted to recover added plant investments—including expanded storage facilities and extended distribution lines — when the projects are completed. In all, though NWN isn't a performance stock, the utility and its nonregulated activities should provide enough earning power to support the slow-growing dividend, which compensates for NWN's subaverage gas-stock yield.

Gerald Holtzman *September 19, 2003*

(A) Diluted earnings per share. Excludes nonrecurring gain: '87, $0.27; '98, $0.15: '00, $0.11. Next earnings report due early November.

(B) Dividends historically paid in mid-February, mid-May, mid-August, and mid-November. In '99, extra div'd of $0.005/sh. paid Dec. 15. ■ Div'd reinvestment plan available.

(C) Includes intangibles. At 12/31/02: $5.49/sh.
(D) In millions, adjusted for stock split.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	30
Earnings Predictability	65

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PEOPLES ENERGY NYSE-PGL

RECENT PRICE	P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	VALUE LINE
41.67	15.1 (Trailing: 14.3) (Median: 14.0)	0.85	5.1%	469

TIMELINESS 4 Lowered 8/29/03
SAFETY 1 Raised 9/29/95
TECHNICAL 3 Raised 9/5/03
BETA .75 (1.00 = Market)

2006-08 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	55	(+30%)	11%
Low	45	(+10%)	7%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	1	0	0	0	7	3
to Sell	0	0	0	0	1	0	0	2	0

Institutional Decisions

	4Q2002	1Q2003	2Q2003
to Buy	99	95	111
to Sell	74	79	76
Hld's(000)	16752	15868	17304

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	© VALUE LINE PUB., INC.	06-08
High:	31.6	35.0	32.1	32.0	37.4	39.9	40.1	40.3	46.9	44.6	40.4	45.3								
Low:	24.5	27.5	23.4	24.3	29.6	31.3	32.1	31.8	26.2	34.3	27.8	34.9								
	36.13	34.29	36.42	35.63	33.69	31.54	36.09	36.70	29.60	34.29	36.34	32.28	33.66	40.16	64.13	41.81	*57.70*	*50.30*	Revenues per sh [A]	*67.95*
	3.04	3.75	3.92	3.74	3.73	3.67	3.85	3.99	3.68	4.98	4.92	4.44	4.74	5.58	5.84	5.59	*5.80*	*6.00*	"Cash Flow" per sh	*7.50*
	1.66	2.31	2.39	2.07	2.05	2.06	2.11	2.13	1.78	2.96	2.81	2.25	2.39	2.71	3.16	2.80	*2.90*	*2.85*	Earnings per sh [B]	*3.70*
	1.41	1.50	1.58	1.65	1.71	1.76	1.78	1.80	1.80	1.82	1.87	1.91	1.95	2.00	2.03	2.07	*2.12*	*2.16*	Div'ds Decl'd per sh [C] ■	*2.24*
	2.83	2.66	4.15	3.15	3.10	3.40	3.77	2.50	2.75	2.45	2.55	4.05	6.45	7.02	7.52	5.66	*5.05*	*5.85*	Cap'l Spending per sh	*7.80*
	14.27	15.09	16.20	16.61	16.95	17.72	18.02	18.39	18.38	19.49	20.43	21.03	21.66	22.02	22.76	22.74	*23.55*	*25.55*	Book Value per sh [D]	*32.50*
	32.51	32.57	32.62	32.70	32.76	34.77	34.88	34.87	34.91	34.96	35.07	35.26	35.49	35.30	35.40	35.46	*36.75*	*35.00*	Common Shs Outst'g [E]	*32.00*
	13.0	7.8	7.9	11.2	11.8	13.1	15.0	13.3	14.7	10.7	12.7	16.2	15.5	12.1	12.3	13.3	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.0*
	.87	.65	.60	.83	.75	.79	.89	.87	.98	.67	.73	.84	.88	.79	.63	.71			Relative P/E Ratio	*.85*
	6.5%	8.3%	8.4%	7.1%	7.0%	6.5%	5.6%	6.3%	6.9%	5.7%	5.2%	5.2%	5.3%	6.1%	5.2%	5.5%			Avg Ann'l Div'd Yield	*4.7%*
	1258.9	1279.5	1033.4	1198.7	1274.4	1138.1	1194.4	1417.5	2270.2	1482.5	*2120*	*1760*	Revenues ($mill) [A]	*2175*
	74.1	74.4	62.2	103.4	98.4	79.4	84.8	96.1	111.7	99.3	*105*	*100*	Net Profit ($mill)	*120*
	33.6%	30.1%	34.4%	37.6%	36.4%	36.2%	35.9%	34.1%	35.4%	34.2%	*36.0%*	*36.0%*	Income Tax Rate	*36.0%*
	5.9%	5.8%	6.0%	8.6%	7.7%	7.0%	7.1%	6.8%	4.9%	6.7%	*5.0%*	*5.7%*	Net Profit Margin	*5.5%*
	45.7%	49.4%	49.2%	43.6%	42.4%	41.1%	40.4%	35.1%	44.4%	40.7%	*46.5%*	*45.5%*	Long-Term Debt Ratio	*38.5%*
	54.3%	50.6%	50.8%	56.4%	57.6%	58.9%	59.6%	64.9%	55.6%	59.3%	*53.5%*	*54.5%*	Common Equity Ratio	*61.5%*
	1156.5	1267.5	1263.6	1208.3	1243.5	1258.0	1290.5	1196.7	1449.8	1360.3	*1610*	*1640*	Total Capital ($mill)	*1690*
	1318.0	1341.9	1373.1	1381.1	1402.2	1446.7	1519.8	1645.3	1753.9	1773.9	*1975*	*1975*	Net Plant ($mill)	*2305*
	8.1%	7.8%	7.0%	10.3%	9.5%	7.8%	8.0%	9.5%	9.3%	8.4%	*8.0%*	*8.0%*	Return on Total Cap'l	*8.5%*
	11.8%	11.6%	9.7%	15.2%	13.7%	10.7%	11.0%	12.4%	13.9%	12.3%	*12.0%*	*11.0%*	Return on Shr. Equity	*11.5%*
	11.7%	11.6%	9.7%	15.2%	13.7%	10.7%	11.0%	12.4%	13.9%	12.3%	*12.0%*	*11.0%*	Return on Com Equity	*11.5%*
	1.9%	1.9%	NMF	5.9%	4.7%	1.7%	2.1%	3.4%	5.0%	3.3%	*3.0%*	*2.5%*	Retained to Com Eq	*4.5%*
	84%	84%	101%	61%	66%	84%	81%	73%	64%	73%	*74%*	*76%*	All Div'ds to Net Prof	*60%*

% TOT. RETURN 8/03

	THIS STOCK	VL ARITH. INDEX
1 yr.	27.0	30.9
3 yr.	45.1	15.9
5 yr.	55.9	77.9

Target Price Range 2006 | 2007 | 2008

CAPITAL STRUCTURE as of 6/30/03

Total Debt $896.3 mill. Due in 5 Yrs $610.0 mill.

LT Debt $744.3 mill. LT Interest $57.0 mill.
(Total interest coverage: 4.7x)

Pension Assets-9/02 $544.9 mill.
Oblig. $515.8 mill.

Pfd Stock None

Common Stock 36,666,025 shs.
(outstanding at 7/31/03)

MARKET CAP: $1.5 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2001	2002	6/30/03
Cash Assets	77.1	34.0	70.4
Other	662.5	357.9	471.9
Current Assets	739.6	391.9	542.3
Accts Payable	296.1	213.9	296.1
Debt Due	607.5	377.9	152.0
Other	149.6	178.0	237.1
Current Liab.	1053.2	769.8	685.2
Fix. Chg. Cov.	331%	259%	395%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	4.0%	8.0%	*5.5%*
"Cash Flow"	4.5%	4.5%	*5.0%*
Earnings	3.5%	3.0%	*4.0%*
Dividends	2.0%	2.0%	*1.5%*
Book Value	3.0%	3.0%	*6.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) [A] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	411.7	525.5	261.2	219.1	1417.5
2001	717.0	1073.8	318.5	160.9	2270.2
2002	377.5	522.8	347.1	235.1	1482.5
2003	549.1	903.8	398.1	*269.0*	*2120*
2004	*450*	*690*	*385*	*235*	*1760*

Fiscal Year Ends	EARNINGS PER SHARE [A B] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	.83	1.62	.31	d.05	2.71
2001	1.03	1.76	.33	.04	3.16
2002	.87	1.55	.33	.05	2.80
2003	.87	1.77	.22	*.04*	*2.90*
2004	*.90*	*1.60*	*.30*	*.05*	*2.85*

Cal-endar	QUARTERLY DIVIDENDS PAID [C] ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.48	.49	.49	.49	1.95
2000	.49	.50	.50	.50	1.99
2001	.50	.51	.51	.51	2.03
2002	.51	.52	.52	.52	2.07
2003	.53	.53			

BUSINESS: Peoples Energy Corporation distributes natural gas via its utility subsidiaries, Peoples Gas Light & Coke Co. (approx. 850,000 customers at 9/30/02) and North Shore Gas Co. (150,000), in Chicago and northeastern Illinois. Fiscal 2002 volume: 225 bill. cu. ft.: residential, 50%; commercial, 8%; industrial, 2%; transport. 40%. Main supplier is Natural Gas Pipeline Co. of America. Purchased gas costs and revenue taxes accounted for 54% of gas revenues in fiscal '02. 2002 depreciation rate: 3.5%. Est'd plant age: 10 years. Has 2,123 employees. 25,040 shareholders. Directors own 1% of common (1/03 Proxy). Chairman and CEO: Thomas M. Patrick. Inc.: Illinois. Address: 130 East Randolph Drive, Chicago, IL 60601. Telephone: 312-240-4000. Internet: www.pecorp.com.

Peoples Energy's fiscal-third quarter 2003 (ended June 30th) earnings came in a bit lower than expected. The company's gas distribution business benefited from weather that was 9.6% colder than normal, but overall operating income shrank nearly 25% from last year's comparable period. This was primarily due to a $5 million increase to boost the reserve for uncollectible accounts, given higher natural gas costs and colder weather. Other detriments to the segment's results included lower margin owing to customer conservation, reduced pension credits, and higher non-labor operating costs. Despite these challenges, management maintains that fiscal 2003 share earnings will fall in the $2.85-$2.95 range. At this juncture, we are leaving our estimate of $2.90 a share unchanged.

Diversified energy businesses, for the most part, are doing well. In the Power Generation segment, equity investment income from the jointly operated Southeast Chicago Energy Project increased nicely over last year. Results for the Midstream Services group, on the other hand, were slightly in the red, due to lower wholesale marketing results.

Peoples' Oil and Gas division, in particular, is supporting earnings during the seasonally weak periods. Higher commodity prices, coupled with increased gas production volumes, led the segment to more than double its operating income in the third quarter. Indeed, production growth (50% and 30% for gas and oil, respectively) stemmed from the company's ongoing drilling efforts, as well as from the acquisition of five properties from Magnum Hunter and additional interests in the Corpus Christi West Field. Over the first nine months of fiscal 2003, this segment accounted for roughly 12% of total operating income, as compared to 8% in 2002. We estimate that production volumes will increase 10% in fiscal 2004, based on recent momentum.

Income-oriented investors may find PGL attractive for its healthy dividend yield. Too, Peoples' financial position is improving, as total debt-to-total capital fell 3% at the end of June. The stock's high Safety rank (1) also makes it a good choice for conservative accounts.

Edward Plank *September 19, 2003*

(A) Fiscal year ends Sept. 30th.
(B) Basic earnings per share. Excludes acct'g gains/(losses): '89, $0.30; '99, $0.22; '00, ($0.27). Next earnings report due late October.
(C) Dividends historically paid mid-January, April, July, October ■ Dividend reinvestment plan available.
(D) Includes deferred charges. At 9/30/02: $33.2 mill., $0.93/sh.
(E) In millions.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	40
Earnings Predictability	80

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PIEDMONT NAT'L. NYSE-PNY

RECENT PRICE 39.31 | P/E RATIO 17.2 (Trailing: 19.5 Median: 15.0) | RELATIVE P/E RATIO 0.97 | DIV'D YLD 4.2% | VALUE LINE 470

TIMELINESS 5 Lowered 9 12 03
SAFETY 2 New 7 27 90
TECHNICAL 3 Raised 5 9 03
BETA .70 (1.00 = Market)

2006-08 PROJECTIONS

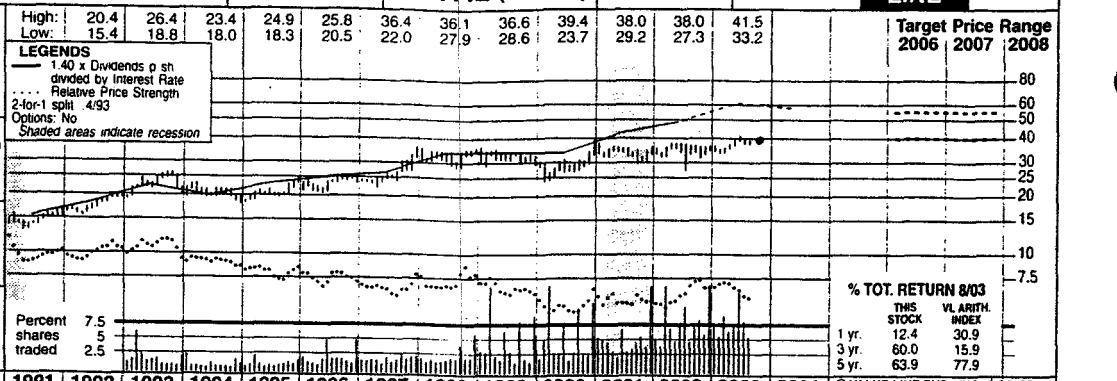
	Price	Gain	Ann'l Total Return
High	55	(+40%)	12%
Low	40	(Nil)	5%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	2	2	0	7	3	1	0	0	4
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	1	3	0	2	1	0	3

Institutional Decisions

	4Q2002	1Q2003	2Q2003
to Buy	63	62	62
to Sell	47	52	61
Hld's(000)	9260	9510	9448



1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	© VALUE LINE PUB., INC.	06-08
23.04	19.62	20.25	18.84	16.64	17.83	21.14	21.65	17.52	23.18	25.69	24.90	21.94	26.02	34.13	25.14	*35.05*	*30.60*	Revenues per sh [A]	*38.15*
1.74	1.75	1.92	1.94	1.56	2.15	2.28	2.26	2.51	2.98	3.25	3.44	3.39	3.54	3.62	3.62	*3.90*	*4.30*	"Cash Flow" per sh	*5.30*
1.10	1.19	1.21	1.22	.89	1.40	1.45	1.35	1.45	1.67	1.85	1.96	1.86	2.01	2.02	1.89	*2.15*	*2.30*	Earnings per sh [B]	*3.05*
.65	.72	.79	.83	.87	.91	.95	1.01	1.09	1.15	1.21	1.28	1.36	1.44	1.52	1.60	*1.66*	*1.72*	Div'ds Decl'd per sh [C]	*1.90*
2.85	3.74	3.11	3.24	2.75	2.81	3.16	3.90	3.44	3.27	3.05	2.96	3.15	3.30	2.57	2.42	*2.10*	*2.80*	Cap'l Spending per sh	*3.55*
7.49	8.25	8.73	9.15	9.65	10.27	10.90	11.36	12.31	13.07	13.90	14.91	15.71	16.52	17.26	17.82	*19.85*	*20.75*	Book Value per sh [D]	*23.45*
17.87	20.33	20.78	21.43	24.73	25.80	26.15	26.58	28.84	29.55	30.19	30.74	31.30	31.91	32.46	33.09	*33.50*	*34.00*	Common Shs Outst'g [E]	*35.00*
10.2	9.1	10.3	11.3	16.3	12.3	15.4	15.7	13.8	13.9	13.6	16.3	17.7	14.3	16.7	18.4	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*16.0*
.68	.76	.78	.84	1.04	.75	.91	1.03	.92	.87	.78	.85	1.01	.93	.86	.98			Relative P/E Ratio	*1.05*
5.8%	6.7%	6.3%	6.0%	6.0%	5.3%	4.3%	4.8%	5.4%	4.9%	4.8%	4.0%	4.1%	5.0%	4.5%	4.6%			Avg Ann'l Div'd Yield	*3.9%*
552.8	575.4	505.2	685.1	775.5	765.3	686.5	830.4	1107.9	832.0	*1175*	*1040*	Revenues ($mill) [A]	*1335*
37.5	35.5	40.3	48.6	55.2	60.3	58.2	64.0	65.5	62.2	*75.0*	*80.0*	Net Profit ($mill)	*105.0*
38.4%	37.6%	38.7%	38.9%	39.1%	39.2%	39.7%	34.7%	34.6%	33.1%	*35.0%*	*35.0%*	Income Tax Rate	*35.0%*
6.8%	6.2%	8.0%	7.1%	7.1%	7.9%	8.5%	7.7%	5.9%	7.5%	*6.1%*	*7.5%*	Net Profit Margin	*8.0%*
49.4%	50.9%	50.4%	50.3%	47.6%	44.7%	46.2%	46.1%	47.6%	43.9%	*41.0%*	*39.0%*	Long-Term Debt Ratio	*35.5%*
50.6%	49.1%	49.6%	49.7%	52.4%	55.3%	53.8%	53.9%	52.4%	56.1%	*59.0%*	*61.0%*	Common Equity Ratio	*64.5%*
563.0	615.0	716.0	777.1	800.8	829.3	914.7	978.4	1069.4	1051.6	*1125*	*1155*	Total Capital ($mill)	*1270*
654.5	734.9	801.3	862.0	941.7	990.6	1047.0	1072.0	1114.7	1158.5	*1190*	*1190*	Net Plant ($mill)	*1310*
8.6%	7.7%	7.5%	8.2%	8.9%	9.2%	8.1%	8.3%	7.9%	7.8%	*8.0%*	*8.5%*	Return on Total Cap'l	*10.0%*
13.2%	11.8%	11.4%	12.6%	13.1%	13.2%	11.8%	12.1%	11.7%	10.6%	*10.5%*	*11.5%*	Return on Shr. Equity	*13.0%*
13.2%	11.8%	11.4%	12.6%	13.1%	13.2%	11.8%	12.1%	11.7%	10.6%	*10.5%*	*11.5%*	Return on Com Equity	*13.0%*
4.4%	2.8%	2.7%	3.9%	4.6%	4.7%	3.3%	3.5%	3.0%	1.7%	*2.0%*	*3.0%*	Retained to Com Eq	*4.5%*
67%	76%	76%	69%	65%	65%	72%	71%	75%	83%	*79%*	*73%*	All Div'ds to Net Prof	*63%*

CAPITAL STRUCTURE as of 4/30/03
Total Debt $509.0 mill. Due in 5 Yrs $175.0 mill.
LT Debt $462.0 mill. LT Interest $41.0 mill.
(LT interest earned: 3.3x; total interest coverage: 3.7x)

Pension Assets-10/02 $125.1 mill.
Oblig. $149.7 mill.

Pfd Stock None

Common Stock 33,440,810 shs.
as of 6/3/03
MARKET CAP: $1.3 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2001	2002	4/30/03
Cash Assets	5.6	13.1	69.8
Other	169.7	162.7	189.2
Current Assets	175.3	175.8	259.0
Accts Payable	41.1	51.1	78.8
Debt Due	34.0	93.5	47.0
Other	74.1	60.5	84.3
Current Liab.	149.2	205.1	210.1
Fix. Chg. Cov.	307%	290%	288%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	5.0%	5.0%	*5.0%*
"Cash Flow"	6.5%	4.5%	*6.5%*
Earnings	5.5%	3.5%	*7.5%*
Dividends	5.5%	6.0%	*4.0%*
Book Value	6.0%	5.5%	*5.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) [A] Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year
2000	268.6	283.0	131.2	147.6	830.4
2001	467.6	408.0	121.8	110.5	1107.9
2002	288.7	293.9	127.9	121.5	832.0
2003	493.5	407.8	140.1	*133.6*	*1175*
2004	*365*	*385*	*150*	*140*	*1040*

Fiscal Year Ends	EARNINGS PER SHARE [A B F] Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year
2000	1.40	1.18	d.32	d.25	2.01
2001	1.56	1.23	d.37	d.40	2.02
2002	1.26	1.27	d.27	d.36	1.89
2003	1.74	.93	d.29	*d.23*	*2.15*
2004	*1.55*	*1.25*	*d.25*	*d.25*	*2.30*

Calendar	QUARTERLY DIVIDENDS PAID [C] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.325	.345	.345	.345	1.36
2000	.345	.365	.365	.365	1.44
2001	.365	.385	.385	.385	1.52
2002	.40	.40	.40	.40	1.60
2003	.415	.415	.415		

BUSINESS: Piedmont Natural Gas Company is primarily a regulated natural gas distributor, serving over 740,000 customers in North Carolina, South Carolina, and Tennessee. 2002 revenue mix: residential (30%), commercial (22%), industrial (45%), other (3%). Principal suppliers: Transco and Tennessee Pipeline. Gas costs: 53.3% of revenues. '02 depreciation rate: 3.3%. Estimated plant age: 8.7 years. Non-regulated operations: sale of gas-powered heating equipment; natural gas brokering; propane sales. Has about 1,715 employees, 18,665 shareholders of record. CEO & President: Thomas E. Skains. Incorporated: North Carolina. Address: 1915 Rexford Road, P.O. Box 33068 Charlotte, NC 28233. Telephone: 704-364-3120. Internet: www.piedmontng.com.

Piedmont Natural gas posted a larger share loss in the July quarter than we anticipated. The utility's bottom-line results fell $0.10 a share below our estimate. The new method of revenue recognition Piedmont implemented earlier this year slashed earnings by $0.13 a share in the seasonally weak quarter. Excluding this factor, operating results would have improved about 40% over last year, thanks to rate increases in the Carolinas and stronger earnings at SouthStar Energy, the company's unregulated gas marketing venture in Georgia.

The purchase of North Carolina Natural Gas (NCNG) should close during the current quarter. Piedmont received regulatory approval for the purchase during the third quarter. The $425 million acquisition will be financed with $250 million in long-term debt and $200 million in equity. The deal will add about 176,000 residential, commercial and industrial natural gas customers in eastern and southern North Carolina. Assuming the deal goes through, the transaction will dilute fiscal 2003 (ends October 31st) share-earnings by $0.05 to $0.07. Management will update its profit outlook for fiscal 2004 on its fourth-quarter conference call in November, subsequent to the acquisition's close. Two rate relief cases, which are expected to be in place by November, are presently under way, as well—one in North Carolina, the other in Tennessee—and should buoy profits in 2004.

In all, Piedmont's long-term outlook is favorable. While we have lowered our profit target by $0.10 a share for fiscal 2003, this is mainly to reflect the company's third-quarter results and the earnings dilution associated with the NCNG acquisition. PNY's annual customer growth rate should approximate 3.5% this year, less than historical norms, but higher than the industry average. Long term, we believe the company is positioning itself well for strong earnings growth.

This issue is appropriate for conservative accounts. Piedmont's dividend yield remains an attraction, and we expect steady increases in payments going forward. Furthermore, risk should be held to a minimum, considering the stock's above average Safety grade.

Edward Plank *September 19, 2003*

(A) Fiscal year ends October 31st.
(B) Diluted earnings. Excl. extraordinary item: '00, 16c. Excl. nonrecurring charge: '97, 4c. Next egs. report due mid November.
(C) Dividends historically paid mid-January, April, July, October.
■ Div'd reinvest. plan available: 5% discount.
(D) Incl. def'd chrgs. At 10/31/02: $3.8 mill., 11¢/sh.
(E) In millions, adj. for stock split.
(F) Qtrs. may not add to total due to change in shares outstanding.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	65
Earnings Predictability	85

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WGL HOLDINGS NYSE-WGL

RECENT PRICE 27.60 | P/E RATIO 13.9 (Trailing: 12.5 Median: 15.0) | RELATIVE P/E RATIO 0.79 | DIV'D YLD 4.6% | VALUE LINE 476

TIMELINESS 3 Raised 11/15/02
SAFETY 1 Raised 4/2/93
TECHNICAL 3 Lowered 7/18/03
BETA .65 (1.00 = Market)

2006-08 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	35	(+25%)	10%
Low	30	(+10%)	6%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2002	1Q2003	2Q2003
to Buy	56	74	78
to Sell	43	49	64
Hld's(000)	21535	21895	23185

	High:	19.6	22.9	21.3	22.4	25.0	31.4	30.8	29.4	31.5	30.5	29.5	28.8
	Low:	15.6	18.1	16.0	16.1	19.1	20.9	23.1	21.0	21.8	25.3	19.3	23.2

Target Price Range 2006 | 2007 | 2008

LEGENDS
— 1.20 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 5/95
Options: No
Shaded areas indicate recession

2-for-1

Percent shares traded 4.5 3 1.5

% TOT. RETURN 8/03

	THIS STOCK	VL ARITH. INDEX
1 yr.	16.9	30.9
3 yr.	22.6	15.9
5 yr.	38.0	77.9

1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	VALUE LINE PUB., INC.	06-08
20.17	18.17	19.52	18.75	17.50	18.37	21.55	21.69	19.30	22.19	24.16	23.74	20.92	22.19	29.80	32.63	*38.20*	*37.65*	Revenues per sh [A]	*40.70*
2.03	1.90	2.03	2.17	2.04	2.17	2.25	2.43	2.51	2.93	3.02	2.79	2.74	3.20	3.24	2.63	*3.85*	*3.70*	"Cash Flow" per sh	*4.45*
1.14	1.26	1.22	1.26	1.14	1.27	1.31	1.42	1.45	1.85	1.85	1.54	1.47	1.79	1.88	1.14	*2.20*	*1.95*	Earnings per sh [B]	*2.40*
.90	.94	.97	1.01	1.05	1.07	1.09	1.11	1.12	1.14	1.17	1.20	1.22	1.24	1.26	1.27	*1.28*	*1.29*	Div'ds Decl'd per sh [C] ■	*1.33*
2.32	2.79	3.00	2.38	2.05	2.17	2.43	2.84	2.63	2.85	3.20	3.62	3.42	2.67	2.68	3.34	*3.60*	*3.80*	Cap'l Spending per sh	*4.10*
9.40	9.96	9.86	10.17	9.63	10.66	11.04	11.51	11.95	12.79	13.48	13.86	14.72	15.31	16.24	15.78	*16.95*	*17.60*	Book Value per sh [D]	*21.10*
33.91	38.42	38.70	39.23	39.89	40.62	41.50	42.19	42.93	43.70	43.70	43.84	46.47	46.47	48.54	48.56	*48.50*	*48.50*	Common Shs Outst'g [E]	*48.50*
11.0	9.6	10.6	11.7	12.8	13.6	15.6	14.0	12.7	11.5	12.7	17.2	17.3	14.6	14.7	23.1	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.0*
.74	.80	.80	.87	.82	.82	.92	.92	.85	.72	.73	.89	.99	.95	.75	1.22			Relative P/E Ratio	*.85*
7.2%	7.8%	7.5%	6.9%	7.2%	6.2%	5.3%	5.6%	6.1%	5.4%	5.0%	4.5%	4.8%	4.8%	4.6%	4.8%			Avg Ann'l Div'd Yield	*4.3%*
894.3	914.9	828.7	969.8	1055.8	1040.6	972.1	1031.1	1446.5	1584.8	*1900*	*1825*	Revenues ($mill) [A]	*1975*
55.1	60.5	62.9	81.6	82.0	68.6	68.8	84.6	89.9	55.7	*105*	*95.0*	Net Profit ($mill)	*115*
38.6%	38.1%	37.4%	37.7%	36.9%	35.6%	36.0%	36.1%	39.6%	34.0%	*37.0%*	*37.0%*	Income Tax Rate	*37.0%*
6.2%	6.6%	7.6%	8.4%	7.8%	6.6%	7.1%	8.2%	6.2%	3.5%	*5.6%*	*5.2%*	Net Profit Margin	*5.9%*
41.7%	40.0%	37.8%	37.6%	41.1%	40.3%	41.5%	43.1%	41.7%	45.7%	*42.0%*	*43.0%*	Long-Term Debt Ratio	*42.0%*
54.9%	56.7%	58.9%	59.4%	56.2%	57.1%	56.1%	54.8%	56.3%	52.4%	*57.0%*	*56.0%*	Common Equity Ratio	*56.0%*
834.3	856.3	870.6	941.1	1049.0	1064.8	1218.5	1299.2	1400.8	1462.5	*1505*	*1585*	Total Capital ($mill)	*1785*
921.1	995.0	1056.1	1130.6	1217.1	1319.5	1402.7	1460.3	1519.7	1606.8	*1700*	*1750*	Net Plant ($mill)	*1950*
8.1%	8.7%	8.7%	10.1%	9.3%	8.0%	7.1%	7.9%	7.9%	5.3%	*7.0%*	*6.5%*	Return on Total Cap'l	*7.0%*
11.3%	11.8%	11.6%	13.9%	13.3%	10.8%	9.7%	11.4%	11.0%	7.0%	*12.0%*	*10.5%*	Return on Shr. Equity	*11.5%*
11.7%	12.2%	12.0%	14.4%	13.7%	11.1%	9.9%	11.7%	11.2%	7.2%	*12.0%*	*10.5%*	Return on Com Equity	*11.5%*
2.2%	2.6%	2.8%	5.6%	5.1%	2.5%	1.8%	3.7%	3.8%	NMF	*5.0%*	*3.5%*	Retained to Com Eq	*5.0%*
81%	79%	77%	62%	63%	78%	82%	69%	67%	112%	*60%*	*68%*	All Div'ds to Net Prof	*56%*

CAPITAL STRUCTURE as of 6/30/03
Total Debt 689.9 mill. Due in 5 Yrs 368.9 mill.
LT Debt $623.3 mill. LT Interest $45.0 mill.
(Total interest coverage: 2.8x)

Pension Assets-9/02 $611.2 mill. Oblig. $567.1 mill.
Preferred Stock $28.2 mill. Pfd Div'd $1.3 mill.

Common Stock 48,600,881 shs.
as of 7/31/03
MARKET CAP: $1.3 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2001	2002	6/30/03
Cash Assets	12.1	2.5	6.6
Other	380.4	338.3	405.5
Current Assets	392.5	340.8	412.1
Accts Payable	116.8	138.5	168.0
Debt Due	182.2	133.3	66.6
Other	61.9	65.7	128.1
Current Liab.	360.9	337.5	362.7
Fix. Chg. Cov.	381%	337%	*325%*

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	4.5%	5.0%	*6.5%*
"Cash Flow"	3.5%	1.5%	*6.5%*
Earnings	3.0%	-1.5%	*7.0%*
Dividends	2.0%	2.0%	*1.0%*
Book Value	4.5%	4.5%	*3.0%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) [A] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	310.5	392.3	171.6	156.7	1031.1
2001	540.3	605.2	182.4	118.6	1446.5
2002	417.1	564.8	314.2	288.7	1584.8
2003	357.7	851.1	373.2	*318*	*1900*
2004	*550*	*665*	*320*	*290*	*1825*

Fiscal Year Ends	EARNINGS PER SHARE [A] [B] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2000	.85	1.39	d.12	d.33	1.79
2001	1.08	1.33	d.15	d.38	1.88
2002	.66	1.09	d.14	d.47	1.14
2003	1.06	1.61	d.05	*d.42*	*2.20*
2004	*1.00*	*1.45*	*d.10*	*d.40*	*1.95*

Cal-endar	QUARTERLY DIVIDENDS PAID [C] ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.30	.305	.305	.305	1.22
2000	.305	.31	.31	.31	1.24
2001	.31	.315	.315	.315	1.26
2002	.315	.318	.318	.318	1.27
2003	.318	.32	.32		

BUSINESS: WGL Holdings, Inc. is the parent of Washington Gas Light, a natural gas distributor in Washington, D.C. and adjacent areas of VA. and MD. to resident'l and comm'l users (939,291 meters). Hampshire Gas, a federally regulated sub., operates an underground gas-storage facility in WV. Non-regulated subs.: Wash. Gas Energy Svcs. sells and delivers natural gas and provides energy related products in the D.C. metro area; Wash. Gas Energy Sys. designs/installs comm'l heating, ventilating, and air cond. systems. Has 2,205 employees. Off./dir. own less than 1% of the common stock (1/03 proxy). Chairman & CEO: J.H. DeGraffenreidt. Inc.: D.C. and VA. Address: 1100 H St., N.W., Washington, D.C. 20080. Tel.: 202-624-6410. Internet: www.wglholdings.com.

Fiscal 2003 (ends September 30, 2003) is turning into a stellar earnings year for WGL Holdings. We are raising our full-year share-net estimate by $0.15 from our last report in June, to $2.20. The increase is based on a lower-than-expected loss in the June quarter, as well as our new projections for narrower operating losses in the fourth quarter than a year ago. Better results in the third quarter were primarily a result of seasonably cool temperatures that benefited the utility business, which was also the predominant driver of earnings in the first half of the year. We look for the seasonally weak fourth quarter to generate losses $0.05 below a year-ago's losses, due to WGL's disposal of its residential HVAC business. Earnings in 2004 are likely to be lower than this year, however, since we do not anticipate another extremely cold winter in WGL's service territory.

The company has a number of pending rate cases. In Maryland, it has a $29 million rate increase application that should receive a ruling by the end of October. This potential rate change would go into effect at the start of the winter heating season. Elsewhere, the pending rate case in the District of Columbia for $19 million could receive a verdict by the end of December, while WGL is waiting for a final decision on a $24 million rate increase in Virginia, already in place but subject to a refund.

WGL Holdings appears to be shielded from Mirant's bankruptcy. Independent power producer Mirant filed for Chapter 11 bankruptcy protection in July. WGL's nonregulated subsidiary, Washington Gas Energy Services, has wholesale electricity supply contracts with Mirant. To date, Mirant continues to honor the contracts. Washington Gas has access to $30 million in collateral from an escrow account as part of the supply contract agreement, which it will receive in the event that Mirant stops service.

This stock is a high-quality income issue. It offers a competitive yield and holds top-notch ratings for Safety (1 ranking) and Stock Price Stability (100). It's a good choice for conservative investors. We note, however, that this stock has limited possibilities for share-price appreciation.

Michael P. Maloney *September 19, 2003*

(A) Beginning 1989, fiscal years end Sept. 30th. (B) Based on diluted shares. Excludes nonrecurring losses: '01, (13c); '02, (34c). Next earnings report due late Oct.

(C) Dividends historically paid early February, May, August, and November. ■ Dividend reinvestment plan available.
(D) Includes deferred charges and intangibles. '02: $166.0 million, $3.42/sh. (E) In millions, adjusted for stock split.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	55
Earnings Predictability	60

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SOUTH JERSEY INDS. NYSE-SJI

RECENT PRICE 38.41 | P/E RATIO 14.5 (Trailing: 14.1 / Median: 14.0) | RELATIVE P/E RATIO 0.82 | DIV'D YLD 4.0% | VALUE LINE 472

TIMELINESS 3 Raised 9/13/02
SAFETY 2 Lowered 1/4/91
TECHNICAL 3 Lowered 7/11/03
BETA .50 (1.00 = Market)

2006-08 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+30%)	10%
Low	35	(-10%)	2%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	1	0	0	1	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2002	1Q2003	2Q2003
to Buy	35	31	40
to Sell	25	27	30
Hld's(000)	4937	4477	4658

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	© VALUE LINE PUB., INC.	06-08
High:	23.2	27.5	24.0	23.5	24.6	30.5	30.8	30.8	30.1	34.1	36.7	39.2								
Low:	19.1	21.8	16.6	17.9	20.1	21.0	22.0	21.5	24.5	27.6	28.2	30.5								
	32.59	29.66	30.54	28.80	30.19	33.33	34.06	34.90	33.00	33.05	32.36	41.77	35.19	44.86	70.60	41.38	*56.00*	*58.60*	Revenues per sh	*62.95*
	2.79	3.03	3.00	2.68	2.75	3.12	3.08	2.70	3.30	3.08	3.19	2.87	3.67	3.90	3.79	4.25	*4.50*	*4.70*	"Cash Flow" per sh	*5.10*
	1.57	1.88	1.66	1.33	1.27	1.61	1.55	1.21	1.65	1.70	1.71	1.28	2.01	2.16	2.29	2.43	*2.65*	*2.80*	Earnings per sh [A]	*3.30*
	1.26	1.29	1.36	1.40	1.41	1.41	1.43	1.44	1.44	1.44	1.44	1.44	1.44	1.46	1.48	1.51	*1.54*	*1.58*	Div'ds Decl'd per sh [B] ●	*1.60*
	4.25	4.41	4.55	4.21	4.34	3.39	3.74	3.86	4.16	4.02	4.61	6.11	4.37	4.42	5.64	6.94	*5.20*	*5.10*	Cap'l Spending per sh	*5.20*
	12.42	13.24	13.49	13.58	13.53	13.90	14.33	14.46	14.67	16.06	12.86	12.45	13.48	14.50	15.62	19.34	*20.95*	*22.45*	Book Value per sh	*28.75*
	7.84	8.47	8.48	9.03	9.24	9.50	9.80	10.72	10.72	10.76	10.77	10.78	11.15	11.50	11.86	12.21	*12.50*	*12.80*	Common Shs Outst'g [C]	*13.50*
	12.7	9.3	11.9	13.6	14.5	13.2	15.8	16.1	12.2	13.3	13.8	21.2	13.3	13.0	13.6	13.5	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.0*
	.85	.77	.90	1.01	.93	.80	.93	1.06	.82	.83	.80	1.10	.76	.85	.70	.74			Relative P/E Ratio	*.85*
	6.3%	7.4%	6.9%	7.7%	7.6%	6.6%	5.9%	7.4%	7.2%	6.4%	6.1%	5.3%	5.4%	5.2%	4.7%	4.6%			Avg Ann'l Div'd Yield	*4.1%*
	333.9	374.0	353.8	355.5	348.6	450.2	392.5	515.9	637.3	505.1	*700*	*750*	Revenues ($mill) [D]	*850*
	15.2	12.6	17.8	18.5	18.4	13.8	22.0	24.7	26.8	29.4	*33.0*	*36.0*	Net Profit ($mill)	*44.0*
	31.8%	35.1%	34.4%	35.5%	36.8%	46.2%	42.8%	43.1%	42.2%	41.4%	*43.0%*	*43.0%*	Income Tax Rate	*43.0%*
	4.5%	3.4%	5.0%	5.2%	5.3%	3.1%	5.6%	4.8%	3.2%	5.8%	*4.7%*	*4.8%*	Net Profit Margin	*5.2%*
	50.2%	49.3%	51.4%	46.1%	54.6%	57.3%	53.8%	54.1%	57.0%	53.6%	*52.0%*	*51.0%*	Long-Term Debt Ratio	*48.0%*
	48.9%	49.9%	47.9%	53.2%	35.8%	33.5%	37.0%	37.6%	35.9%	46.1%	*48.0%*	*49.0%*	Common Equity Ratio	*52.0%*
	287.4	310.6	328.4	324.8	387.1	401.1	405.9	443.5	516.2	512.5	*545*	*590*	Total Capital ($mill)	*750*
	375.4	402.1	422.7	423.9	456.5	504.3	533.3	562.2	607.0	666.6	*700*	*750*	Net Plant ($mill)	*900*
	7.4%	6.1%	7.8%	7.9%	6.7%	5.3%	7.4%	7.4%	6.9%	7.6%	*6.5%*	*6.5%*	Return on Total Cap'l	*6.5%*
	10.6%	8.0%	11.2%	10.5%	10.5%	8.1%	11.7%	12.1%	12.1%	12.4%	*12.5%*	*12.5%*	Return on Shr. Equity	*11.5%*
	10.5%	8.0%	11.2%	10.6%	13.3%	10.3%	14.6%	14.8%	12.8%	12.5%	*12.5%*	*12.5%*	Return on Com Equity	*11.5%*
	.6%	NMF	1.4%	1.6%	2.1%	NMF	4.2%	4.8%	3.5%	4.7%	*4.5%*	*4.5%*	Retained to Com Eq	*5.0%*
	94%	119%	88%	85%	84%	112%	72%	67%	76%	62%	*58%*	*56%*	All Div'ds to Net Prof	*49%*

% TOT. RETURN 8/03

	THIS STOCK	VL ARITH. INDEX
1 yr.	21.4	30.9
3 yr.	63.6	15.9
5 yr.	107.8	77.9

CAPITAL STRUCTURE as of 6/30/03
Total Debt $413.6 mill. Due in 5 Yrs $188.6 mill.
LT Debt $280.0 mill. LT Interest $19.0 mill.
(Inc. $35.0 million in trust-preferred securities)
(Total interest coverage: 3.4x)

Pension Assets-12/02 $63.1 mill. Oblig. $81.1 mill.
Pfd Stock $1.7 mill. Pfd Div'd $.1 mill.
16,904 Series B shs. 8% cum. ($100 par) callable 106.7
Common Stock 12,570,861 common shs.
as of 8/01/03
MARKET CAP: $475 million (Small Cap)

CURRENT POSITION ($MILL.)	2001	2002	6/30/03
Cash Assets	4.0	4.3	4.6
Other	218.1	208.4	196.3
Current Assets	222.1	212.7	200.9
Accts Payable	48.2	76.7	80.5
Debt Due	162.1	177.2	133.6
Other	99.8	62.7	72.9
Current Liab.	310.1	316.6	287.0
Fix. Chg. Cov.	260%	335%	*360%*

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '00-'02 to '06-'08
Revenues	5.5%	10.0%	*NMF*
"Cash Flow"	3.5%	4.5%	*4.0%*
Earnings	5.0%	6.5%	*5.5%*
Dividends	0.5%	0.5%	*1.5%*
Book Value	2.0%	2.5%	*7.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2000	167.5	89.4	75.8	183.2	515.9
2001	342.6	218.6	107.9	168.2	837.3
2002	177.0	84.2	69.1	174.8	505.1
2003	279.8	106.2	*100*	*214*	*700*
2004	*275*	*145*	*110*	*220*	*750*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2000	1.68	--	d.35	.83	2.16
2001	1.87	d.02	d.32	.76	2.29
2002	1.65	.06	d.27	.99	2.43
2003	1.86	.16	*d.30*	*.93*	*2.65*
2004	*1.85*	*.10*	*d.25*	*1.10*	*2.80*

Calendar	QUARTERLY DIVIDENDS PAID [B] ● Mar.31	Jun.30	Sep.30	Dec.31	Full Year
1999	.72	.36	.36	--	1.44
2000	.36	.365	.365	.365	1.46
2001	.365	.37	.37	.37	1.48
2002	.37	.375	.375	.375	1.50
2003	.385	.385	.385		

BUSINESS: South Jersey Industries, Inc. is a holding company. Its subsidiary, South Jersey Gas Co., distributes natural gas to 298,767 customers in New Jersey's southern counties, which cover 2,500 square miles and include Atlantic City. Principal suppliers include Transcontinental Gas Pipeline and Columbia Gas Pipeline. Gas revenue mix: resident'l, 31%; commercial and industrial, 11%; transportion, including off-system sales and gas marketing, 54%; off-system, 4%; cogeneration, power generation. Has 638 employees. Directors cntrl. 1.0% of com. shares; Dimensional Fund Advisors, 6.2% (3/03 proxy). Chrmn. & CEO: Charles Biscieglia. Incorp.: NJ. Address: 1 South Jersey Plaza, Rte. 54, Folsom, NJ 08037. Telephone: 609-561-9000. Web: www.sjindustries.com.

Investors in South Jersey Industries' stock have been rewarded thus far in 2003. The share price has risen nearly 18% since the beginning of the year, which is a feat for a gas utility with a history of excellent share-price stability. Share-price momentum this year has been backed by progress made in South Jersey's businesses, along with the resulting earnings strength that has propelled the bottom line to company-record levels. On the regulated distribution side, South Jersey is taking advantage of population growth within its supply area. It has been able to expand its customer base by an average annual rate of 2.7%, and we believe that the company can maintain that clip over the next several years. Meanwhile, the company has made significant headway on the nonutility front. Last quarter, it commenced operations of the Marina Energy power facility. The $54 million, 26,000-square-foot thermal plant is servicing the Borgata Hotel Casino and Spa in Atlantic City, which opened in July. South Jersey has a 20-year contract with the casino to provide electricity and natural gas for heating, air conditioning, and hot water.

The company is seeking its first rate increase in nine years. It is requesting a hike of $42.4 million in operating revenues, representing a 8.7% increase. South Jersey claims that the adjustment is necessary to cover the $300 million that the company has spent to build, maintain, and improve the natural gas infrastructure in southern New Jersey, in addition to future considerations to support further development in the region. The rate case will probably take a year to process, meaning that any rate increases granted will not take effect until at least the fall of 2004.

This issue is a decent income stock. The dividend yield has come down a bit due to strength in the stock price this year, but the company has a history of increasing the quarterly dividend. Also, continued year-over-year earnings advances should provide ample support to the stock at its current quotation. There is probably not much room left for further share-price appreciation at these levels, though. South Jersey still has some appeal for conservative investors.

Michael P. Maloney *September 19, 2003*

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	55
Earnings Predictability	80

(A) Based on avg. shs. Excl. nonrecur. gain (loss): '01, $0.13. Excl gain (losses) from discont. ops.: '96, $1.14; '97, ($0.24); '98, ($0.26); '99, ($0.02); '00, ($0.04); '01, ($0.02); '02, ($0.04). Excl. gain due to acct'g change: '93, $0.04; '01, $0.14. Next egs. report late Oct. (B) Dividends historically paid early Jan., Apr., Jul., and Oct. ● Div. reinvest. plan avail. (2% disc.). (C) In mill. (D) Refls. chg. in acctg. for energy tdg. beg. 3Q'02. Qrtrly. revs. don't sum.

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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WEST WATER AND WASTEWATER DISTRICTS.	**DOCKET NOS. WS-01303A-02-0867** **WS-01303A-02-0868** **W-01303A-02-0869** **WS-01303A-02-0870** **W-01303A-02-0908**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS.	
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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.

KOZOMAN

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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0868**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	**DOCKET NO. W-01303A-02-0869**

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.	**DOCKET NO. WS-01303A-02-0870**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.	**DOCKET NO. W-01303A-02-0908**

REBUTTAL TESTIMONY OF

RONALD L. KOZOMAN

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND ADDRESS?

A. Ronald L. Kozoman. 1605 W. Mulberry Drive, Phoenix, AZ 85015.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THE INSTANT CASE?

A. Yes, I have.

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. I will provide rebuttal testimony in response to the direct filings by Staff and RUCO. More specifically, my rebuttal testimony relates to rate design and the proposed new rates needed for Arizona-American to recover its revenue requirement. Where appropriate I will use the same abbreviations and conventions that were utilized in my direct testimony.

Q. HOW WILL YOUR REBUTTAL TESTIMONY BE ORGANIZED?

A. I will first provide a summary of the Company's revenue requirement for each water and wastewater district, based on its rebuttal position. As shown below, the Company has made certain adjustments in response to the other parties.

Next, I will discuss Staff's proposed rate design. As explained below, this rate design is poorly conceived and violates fundamental cost of service principles. It is predicated on providing a discounted commodity rate to all customers, and shifting revenue recovery to larger commercial customers, without regard to their cost of service.

Third, I will present cost of service studies for each of the Company's water districts in this case based on Staff's recommendations. These cost of service studies utilize the Staff's recommend revenues, plant, expenses, and so on. The purpose of the studies is to demonstrate the serious flaws in Staff's rate design and the inequities that rate design creates.

Finally, I will address certain rate issues with regard to RUCO and the other intervenors in this case.

As a preliminary matter, I should note that there is no disagreement concerning the Company's Low Income Program, which the Company was required to submit by the Commission in Decision No. 65655 (Feb. 20, 2003). That program applies only in Sun City and Sun City West, and relieves qualifying low income residential customers on 5/8 x 3/4 inch meters and 3/4 inch meters from paying a surcharge associated with the use of Central Arizona Project water in those two districts. Because this program is related to the surcharge, it does not affect the revenue requirements or rate design in this case. Due to the agreement of Staff and RUCO, there is no rebuttal on this topic.

Q. HAVE YOU PREPARED ANY REBUTTAL SCHEDULES?

A. Yes. I have prepared Rebuttal Schedules labeled as H and G. Additionally I have prepared Kozoman Rebuttal Schedules 1, 2, 3, and 4.

II. SUMMARY OF THE COMPANY'S REBUTTAL REVENUES

Q. WHAT ARE THE COMPANY'S PROPOSED RATE INCREASES BASED ON ITS REBUTTAL ADJUSTMENTS?

A. The currently requested revenue requirements and revenue increase for each water and wastewater district, based on the Company's rebuttal adjustments, are as follows:

	Revenue Requirement	Revenue Increase	Percent Increase
Agua Fria	$6,302,757	$119,289	1.93%
Anthem Water	4,025,066	18,658	0.47%
Anthem/Agua Fria Wastewater	2,186,787	323,599	17.37%
Havasu Water	569,225	128,301	29.10%

Mohave Water	4,590,694	196,561	4.47%
Sun City Water	10,543,503	4,364,140	70.62%
Sun City Wastewater	5,404,262	316,400	6.22%
Sun City West Water	4,581,390	1,215,842	36.13%
Sun City West Wastewater	5,140,333	1,608,546	45.56%
Tubac Water	439,919	186,106	73.32%

Q. HOW ARE THE REQUESTED INCREASES ALLOCATED?

A. The Company continues to maintain that the revenue increase for each district should be allocated proportionately to all customers according to the same cost of service based allocation methodology employed by the Commission when the current rates were established.

Kozoman Rebuttal Schedule 1 illustrates the comparable revenue proposals for the Company, Staff and RUCO. On the first page is a summary of the proposed rate increases or decreases. Each party's proposed rates are shown beginning on the second page of the schedule.

Q. HAVE YOU PREPARED A SCHEDULE CONTAINING THE COMPANY'S PROPOSED REBUTTAL RATES FOR EACH DIVISION?

A. Yes, I have prepared separate schedules for each district, which are attached. These schedules are labeled as Rebuttal Schedules H-1, H-2, and H-3, respectively for each district. The schedules show the Company's proposed rebuttal rates by meter sizes, and contain a bill comparison of present and presently proposed rates based on average customer usage.

Q. DOES THE COMPANY STILL PROPOSE TO PHASE IN RATE INCREASES OVER TWO YEARS FOR ANY OF THE SYSTEMS FOR

WHICH THE APPROVED INCREASE IS GREATER THAN 40 PERCENT?

A. Yes, where applicable it does.

III. STAFF'S PROPOSED RATES AND RATE DESIGN

Q. DOES THE COMPANY AGREE WITH STAFF'S PROPOSED RATE DESIGN?

A. No. Staff is proposing radical changes in the Company's rate design for all water districts. Staff is recommending a three-tier inverted block rate structure with breakpoints at 4,000 gallons and at 100,000 gallons of use for all of the Company's districts and for all meter sizes. This rate design is unsupported by a cost of service study and arbitrarily assumes that the breakpoints in the commodity rate should be the same for all customers, regardless of the customer's location and regardless of the customer's service classification and type of use. Staff's rate design violates the principle of designing rates based on the cost of service by generating a subsidy (i.e., selling water below cost in the first rate block) and then requiring customers that use large amounts of water for various non-residential purposes (for example, hospitals and schools) to pay more than the cost of service in order to recover the subsidy.

Q. WHAT IS STAFF'S EXPLANATION FOR THIS RATE DESIGN PROPOSAL?

A. The Staff witness sponsoring this rate design, Mr. Rogers, explains in his direct testimony at page 6 that the discounted commodity rate applicable to the first 4,000 gallons is intended to serve two purposes. First, according to Mr. Rogers, "it supports the state-wide effort to improve water use efficiency. Customers are rewarded monetarily by restricting their use to this level which reflects Staff's view of efficient water use." This reason is, however, illogical. Selling water to

all customers at a discounted rate, that is, a rate below the cost of service, does not encourage "water use efficiency." In reality, this sort of discount will encourage inefficient water use by sending the wrong pricing signal, particularly since the discounted commodity rate is applicable to all customers.

Q. WHAT IS THE SECOND REASON GIVEN BY MR. ROGERS FOR HIS RATE DESIGN?

A. Mr. Rogers also testifies on page 6 of his direct testimony that the discounted rate applicable to the first 4,000 gallons of use is akin to a "lifeline" rate. He states that the discounted rate "effectively serves as a supplementary life-line rate providing affordable water to customers willing to limit consumption to their basic needs. Providing affordable water in limited amounts is appropriate because water is the only utility commodity that is necessary for sustaining life." Once again, however, this rationale makes little sense and is contrary to basic cost of service principles. By definition, a lifeline rate is intended to provide a minimum volume of water service at a reduced cost to residential customers that find it difficult to afford water service due to their income levels. Lifeline rates are discussed by the American Water Works Association ("AWWA") in its Manual 34, entitled *Alternative Rates*. A copy of this manual's chapter on lifeline rates is attached to my rebuttal testimony and labeled as Kozoman Rebuttal Exhibit 1. In summary, the AWWA provides the following recommendations concerning lifeline rates and similar types of discounted rates for water service:

First, lifeline rates should be offered only to residential customers and then only to residential customers who meet certain income eligibility requirements. The reason for this recommendation is obvious: discounted rates, such as those proposed by Staff, are contrary to basic cost of service principles and are not economically efficient, as I previously stated. Discounted rates produce a subsidy

that must be recovered by means of higher rates in other usage blocks, who then pay more than their cost of service.

Second, the AWWA states that lifeline rates and similar types of discounted rates should not be considered unless the local cost of water service is high relative to other, similar water utilities, or where a significant percentage of residential customers are believed to be unable to afford water service. There is no indication in Mr. Rogers' direct testimony that Staff examined whether these circumstances are present. Again, Staff is proposing to establish a discounted rate for all customers, without regard to any customer's particular circumstances or whether such discount is necessary.

Third, the AWWA states that lifeline rates and similar types of discounted rates should not be used in areas where there are water shortages or where water use is a concern. The AWWA states that the use of lifeline rates "may encourage greater use among the eligible customers and therefore be inconsistent with the need to reduce water consumption. In this case, the benefits to customers whose water costs might be reduced would have to be weighed against water use concerns." AWWA, *Alternative Rates* at 11. The AWWA also states that discounted rates "provide no conservation or water reduction incentive to those that receive the subsidy. Since water is sold below cost, the pricing incentive to reduce consumption is lessened. . . . The impact on demand should be carefully considered in areas where water supplies are scarce." *Id.* at 13. In this case, although the Company is not facing water supply shortages, several of its water districts (Sun City, Sun City West, Anthem and Agua Fria) are located within the Phoenix Active Management Area, and are subject to certain water conservation requirements imposed by the Arizona Department of Water Resources. Also, the Tubac water district is located within the Santa Cruz Active Management Area. In

these Active Management Areas, water conservation is an established goal. Staff's proposed rate design is contrary to that goal.

Q. MR. ROGERS CONTENDS IN HIS DIRECT TESTIMONY THAT STAFF'S RATE DESIGN WILL PROMOTE REDUCTIONS IN AVERAGE USE IN THE LONG TERM. DO YOU AGREE?

A. Providing a discounted commodity rate, which is applicable to all customers, is contrary to Mr. Rogers' statement. It is important to keep in mind that the majority of customers will actually see their monthly bills decreased. This decrease will result from the fact that the first 4,000 gallons used by a customer will be priced at a discount. Mr. Rogers provides no explanation for how this sort of rate design, which is intended to address social welfare concerns rather than encouraging water conservation, will lead to a long-term reduction in average water use. Again, as the AWWA states, this type of rate structure should not be utilized where water use is a concern.

Q. DO YOU HAVE ANY COMMENTS ON STAFF'S UPPER RATE BLOCK AND ITS IMPACT ON THE COMPANY AND ITS CUSTOMERS?

A. Yes. Mr. Rogers testifies on page 6 of his direct testimony that the use of a breakpoint at 100,000 gallons "sends an economic signal to potential new customers that consumption at this level is high compared to other customers on the system and is being discouraged." He also states that a "relatively high break-over point is desirable to limit the effect of tiered rates on the vast majority of existing customers." There are several problems with these arguments.

First, Mr. Rogers addresses the "economic signal" that will be given to "potential new customers." He ignores the impact on the Company's existing customers, particularly commercial customers on larger meters. These customers, which include hospitals, schools and other types of public institutions, will receive

substantially greater rate increases. Whether deliberate or not, Staff's rate design will require a relatively small number of large volume users to pay higher rates in order to subsidize the remaining customers by virtue of Staff's initial, discounted rate block. There is no indication in Mr. Rogers' testimony whether he considered the impacts on the customers that use in excess of 100,000 gallons a month in developing his rate design. For example, there is no indication that these customers, while using large amounts of water, are using water inefficiently or have any conservation potential.

Second, Mr. Rogers' statement about the "desirability" of having a high breakpoint, in this case 100,000 gallons, makes little sense for the same reason. If Staff's goal is to encourage water conservation while promoting economic efficiency, a much better approach would be to design rates that are directed at high water users in each customer class. For example, it would be more appropriate to have relatively low breakpoints established for residential customers on smaller-sized meters to encourage them to reduce their water use. A residential customer who uses, on average, 20,000 gallons of water a month may well be using water far less efficiently and have greater conservation potential than, for example, a hospital that uses 150,000 gallons of water each month. By arbitrarily choosing 100,000 gallons per month as the breakpoint between the second and third tiers, without any cost of service study or supporting analysis based on the Company's test year bill count, Staff is ignoring the vast majority of customers and is simply shifting revenue recovery to large users, without regard to their cost of service.

Q. YOU MENTIONED THAT STAFF HAS NOT PERFORMED A COST OF SERVICE STUDY IN ORDER TO EVALUATE WHETHER ITS

PROPOSED RATE DESIGN FAIRLY ALLOCATES THE COST OF SERVICE AMONG THE DIFFERENT CUSTOMER CLASSES.

A. That is correct. Although Staff is proposing to dramatically change the Company's rate design, Staff did not perform a cost of service study to determine the impact of its rate design on various customer classes and whether the customers in those classes would be paying their cost of service.

Q. HAVE YOU PREPARED ANY COST OF SERVICE STUDIES TO EVALUATE STAFF'S RATE DESIGN?

A. Yes. I prepared cost of service studies for each of the Company's water districts using Staff's proposed plant value, expenses, and rates of return. I must emphasize that the Company does <u>not</u> agree with Staff's proposed plant values, expenses, and rates of return. The cost of service studies were prepared using Staff's values to determine if Staff's proposed rates are cost based or cost justified. The cost of service studies show that Staff's rates are not cost based, or even close to being set at cost, with regard to Staff's proposed monthly minimum charges. Nor are the rates cost based for the first 4,000 gallons of water usage.

IV. <u>COST OF SERVICE STUDY</u>

Q. WHAT IS A COST OF SERVICE STUDY?

A. A cost of service study is an allocation of plant and expenses among each class of customers. Utility plant and expenses are allocated to cost and asset functions. The cost functions are then allocated to customer classifications. The process attempts to trace the costs resulting from meeting the customers' service requirements. Ideally, the revenues received from each customer class should equal the cost of providing service to that customer class. The cost to provide service includes the income necessary to pay debt interest, provide a return on the

debt and equity financing the investment, and provide for the income taxes on the equity return.

Q. WHAT IS THE PURPOSE OF A COST OF SERVICE STUDY?

A. The purpose of preparing a cost of service study is to offer guidance in setting rates to be charged for utility service. Rates aren't always set based on the computed cost to serve a particular class of customer. Instead, the cost of service study could be used to move the utility's rates closer to "cost-based" rates. Even if the Commission's goal is to give customers a signal to conserve water, the Commission must base its rates on cost. The cost to produce 20,000 gallons is approximately 20 times the cost to produce 1,000 gallons of water, unless the cost of service study is done on an incremental basis, i.e., if additional plant is needed to produce the additional 19,000 gallons of water.

Additionally, there are many factors at play when rates are set. The regulatory body may be moving toward cost-based rates. However, the regulatory body may also favor subsidizing one class of customer by the other classes of customers. Lifeline rates, discussed above, are a prime example of subsidization of a class of customers by all other customers, or by customers using more commodity than the average customer. Another example is a rate intended to encourage conservation. Thus, public policy may have a significant effect on rate design.

Q. HOW IS YOUR COST OF SERVICE STUDY ORGANIZED?

A. The standard filing requirements call for Schedules G-1 through G-7. I have included Rebuttal Schedules G-1 through G-7. Additionally, I have included Rebuttal Schedules G-8 and G-9, which I will explain later in my testimony.

Rebuttal schedules with higher numbers, i.e., 5, 6 and 7, contain the allocation factors and actual allocations to functions. These functions are then

carried forward to the summary schedules 1, 2, 3 and 4, which allocate expenses and plant (by function) to classes of customers (by meter size).

I will start with the Schedules labeled as G-7 and end with Schedules labeled as G-2 and G-1. I will then describe the Schedules G-8 and G-9.

Q. WHAT IS A FUNCTION?

A. Functions refer to the plant and the expenses needed to obtain and deliver the water (the commodity) from the source (well or surface water) to the customer. The functions are demand, customer, meter, and service.

Demand refers to how the water system is sized to deliver the water. Demand for system size is normally determined by total customers and fire flow requirements. In other words, the system is designed to be able to deliver water (the commodity) to customers when demanded, as well as meeting the demand placed on the water system when water is used to fight a fire.

Commodity refers to the actual volume of water. The commodity function is used to derive the commodity rate or the rate charged per 1,000 gallons of water.

Customer, service, and meter functions are used to develop a portion of the monthly minimum charged to each class of customer. The demand function should be included in the monthly minimum charged customers. However, the current practice of this Commission has been to allocate a portion of the demand function to both the commodity rate and to the monthly minimum charged customers.

Customer, service and meter functions refer to the delivery of the water from the Company's wells, surface sources or reservoirs through the transmission and distribution lines to the individual customer's premises. The costs associated with demand, customer, service and meter functions are incurred whether the customer uses 4,000 or 100,000 gallons of water per month. In fact, certain of

these costs are incurred by the utility even if the customer uses no water. The meter and service functions are subsets of the customer function.

Fire Protection assets (hydrants) and expenses associated with fire protection, including depreciation, were allocated to the customer function, under the concept that fire protection benefits all customers on the system. This has been the Commission policy with regard to fire protection.

Q. WHAT TYPE OF COST OF SERVICE STUDY DID YOU PREPARE TO TEST THE STAFF'S PROPOSED RATES?

A. I used the Commodity-Demand Method for the cost of service study. This method normally separates expenses and assets into three primary functions or components: commodity; demand; customer (with further breakdown of customer costs and plant into meter and service line).

Commodity costs are costs that tend to vary with the production or output of water. These costs would consist primarily of power costs, chemicals, water treatment, purchased water, and other variable expenses. Please note that I included a portion of the demand function into the commodity function, to adhere to the Commission Staff's past methodology. This approach overstates the allocations to the commodity function, resulting in a higher commodity rate and a lower monthly minimum charge.

Demand costs are capital and maintenance costs of facilities related to meeting the peak demand or peak usage requirements. The plant assets that cause the bulk of the demand cost are transmission and distribution mains, wells and pumping equipment.

Customer costs are those costs related to serving and/or having customers, without regard to the amount of water used. These costs would include meter reading, billing, customer accounting and collection, and the capital and

maintenance costs related to the meters, services, and customer equipment such as meters, service lines, computers, office furniture, transportation equipment, and so forth.

In following the practice of this Commission, fire protection costs were allocated to the customer function.

Q. AFTER COSTS ARE ALLOCATED TO FUNCTIONS, HOW ARE EXPENSES AND ASSETS THEN ALLOCATED TO THE INDIVIDUAL CLASSES OF CUSTOMERS?

A. After the expenses and assets are allocated to the commodity, demand, customer, service, and meter functions, these values for the functions are then allocated to various customer classes. Customer classes are by meter sizes on the system.

Q. DOES A COST OF SERVICE STUDY PROVIDE FOR THE DATA FOR A TIERED RATE DESIGN?

A. No. The cost of service study will provide the cost of the commodity, but it will not indicate where rate tiers should be set. Normally, tiers are developed by means of a careful analysis of the water utility's bill count to determine, by customer class or meter size, where breakpoints are appropriate, depending on the specific goals of the rate design. However, a cost of service study is still useful because the starting point in developing tiered rates is the basic cost of service. Without such a cost of service study, the analyst is simply guessing in recommending rates for each tier, as Staff has done in this case.

Q. WOULD YOU PLEASE DESCRIBE AND EXPLAIN THE SCHEDULES WHICH COMPRISE YOUR COST OF SERVICE STUDY, AND WOULD YOU DESCRIBE HOW THE VARIOUS FUNCTIONS WERE DEVELOPED?

A. The allocations for the development of the class allocation factors are shown on Schedule G-7, pages 1 through 3.

The commodity allocation is based on the number of gallons of water used by customers on various sizes of meters, plus the gallons from the revenue annualization to the year-end number of customers, divided by the total gallons of water sold (including gallons from the revenue annualization) during the test year. Thus, if 10,000,000 gallons of water were sold through the 5/8 x 3/4 inch meters, out of a total of 50,000,000 gallons of water sold by the water utility, this meter size would be allocated 20% of the commodity cost.

The demand allocation factor consists of the number of meters for each size of meter on the system, multiplied by the equivalent weight of each size of meter. The equivalent weight is determined by the flow capacity of each meter. A 5/8 x 3/4 inch meter can flow 20 gallons per minute, while a 6 inch meter can flow 1,000 gallons per minute. Thus, one 6 inch meter is equivalent to fifty 5/8 x 3/4 inch meters. The base meter on which larger meters are restated to equivalent meters is the 5/8 x 3/4 inch meter which is the smallest meter.

The customer allocation factor is the number of customers on each size meter. The allocation is based on total meters, not equivalent meters, because customer costs do not vary based on meter size.

I computed the meter allocation factor factors by multiplying the number of meters times the most recent cost of installing a meter. Costs were taken from the Commission Staff Engineering memorandum originated by Marlin Scott, Jr., dated April 23, 2002. The dollar weighted value of meters is then divided by the total computed meter cost to derive the meter allocation factor to each class of customer.

The service line allocations were computed in the same manner as the meters. That is, I used the values listed on the Commission Staff memorandum to derive a total value of the service lines. The allocation to each service line size was the result of dividing the dollar value of the service lines for each customer class by the total dollar value of the service lines.

Schedule G-7, page 2a lists the allocation of expenses for wages/salaries and for repairs and maintenance. These factors were computed using the 2001 Trial Balance from Citizens Communication for the each division. I summed the various categories of expense for wages/salaries. I re-allocated the Operation/Supervision to each wage/salary category. I then used these labor allocations to allocate Staff's recommended wages and salaries to the various functions. This is appropriate because, as explained, the purpose of my cost of service study is to evaluate Staff's rate design.

The same method was used to derive the repairs and maintenance function allocations of expenses for 2001. I applied these allocation functions to Staff's recommended repairs and maintenance.

The depreciation expense allocations shown on Schedule G-6, page 2, apply the allocation factors shown on Schedule G-7, page 2, multiplied by the depreciation expense for each plant asset. For the demand function for Wells, Pumping Equipment and Transmission and Distribution Mains, I assumed an allocation factor of 90%. 10% of plant values and related depreciation expense for Wells, Pumping Equipment and Transmission and Distribution Mains was allocated to the commodity function. The depreciation expense was computed using Staff's depreciation rates.

The operation and maintenance expense allocation to functions (commodity, demand, customer, service, and meter) are shown on Schedule G-6, page 1.

On Schedule G-5, page 2, I allocated net plant rather than gross plant by deducting the accumulated depreciation from each plant asset. Because the Staff did not prepare a schedule showing accumulated depreciation by account for each plant asset, I listed the Company's accumulated depreciation by plant account, and added the Staff's adjustments to accumulated depreciation to derive the net plant values for each water division.

I deducted the advances and contributions in aid of construction from the plant balances normally financed with advances and contributions in aid of construction, which would be transmission and distribution mains. I allocated the advances or contributions to the both the demand and commodity functions, to be consistent with my allocation of the transmission and distribution mains. The allocations are shown on Schedule G-5, page 2.

Then I computed rate bases for each function (commodity, demand, customer, service and meter). The rate bases by function are shown on Schedule G-5, page 1.

Schedule G-4 shows the allocation of the commodity, demand, customer, service and meter expenses to meter sizes using the allocation factors developed on Schedule G-7, page 3.

Schedule G-3 allocates the rate bases for commodity, demand, customer, service, and meter to customer classes, which are meter sizes. On this schedule I allocated the interest expense to the various rate bases, consistent with the Staff's synchronization of interest expense.

Schedules G-1 and G-2 derive the earned rates of return by customer classes (meter sizes) at present and proposed rates respectively. The rates of return are computed by dividing the operating income for each meter size by the value of the rate base for that meter size.

Property taxes are allocated based on revenue, as this is the method used by the Arizona Department of Revenue to determine the full cash value of the utility.

Income Taxes are allocated based on taxable income on Schedules G-1 and G-2

I included the percentage of customer on each size meter on Schedule G-2 to emphasize that Staff's proposed rates will have a substantial adverse impact on the Company's opportunity of actually achieving Staff's recommended rate of return.

V. RATES OF RETURN AT PRESENT AND AT STAFF'S PROPOSED RATES

Q. BASED ON YOUR COST OF SERVICE STUDY, WHAT WERE THE RATES OF RETURN BY DIVISION USING THE STAFF'S RECOMMENDED REVENUES, EXPENSES, PLANT AND RATES OF RETURN AT PRESENT AND PROPOSED RATES?

A. There is a slight difference between what the Staff is showing on its Schedule 1 as the revenue requirement and the revenues contained in the Staff's bill counts. Thus, while the Staff recommends an overall rate of return of 6.60%, there are slight differences in what I compute in the cost of service study because I used Staff bill count revenues at proposed rates, which in some cases produced more or less than the Staff's recommended revenues shown on Staff Schedule 1.

The rates of return at present and at the Staff's proposed rates for each of the water divisions are shown on Kozoman Rebuttal Schedule 2. I will list the

present and proposed rates of return for each water division, and point out what the Commission should be concerned above, as shown on Kozoman Rebuttal Schedule 2. On that Schedule, I have printed some of the proposed rates of return in bold font to highlight the changes in rates of return at present rates and at the Staff's proposed rates.

AGUA FRIA WATER

Agua Fria Water's overall rate of return at present rates was 9.76%. At the Staff's proposed rates the return will drop to 6.57%. The rate of return for the 5/8 x 3/4 inch meter class will be only 3.64%. In contrast, the rates of return for the larger meters are: 1 1/2 inch meter 27.63%, 2 inch meter 25.28%, 3 inch meter 21.35%, and 33.89% for the 4 inch meter

ANTHEM WATER

Anthem Water's overall rate of return at present rates was 8.18%. At the Staff's proposed rates the return will drop to 6.59%. The rate of return for the 5/8 x 3/4 inch meter will be 8.08%. The rates of return for the larger meters are: 1 1/2 inch meter, 41.48%; 2 inch meter, 32.20%; 3 inch meter, 61.09%; and 78.04% for the 4 inch meter class.

HAVASU WATER

Havasu Water's overall rate of return at present rates was 8.91%. At the Staff's proposed rates the return will be 7.38%. (Staff did not include the difference between the bill count revenues and the general ledger in their proposed rates. I did.) The rate of return for the 5/8 x 3/4 inch meter class will be only 1.10%. In contrast, the rates of return for the larger meters are: 1 inch meter, 130.42%; 2 inch meter, 76.55%; 3 inch meter, 38.80%; and 51.81% for the 4 inch meter class.

MOHAVE WATER

Mohave Water's overall rate of return at present rates was 10.93%. At the Staff's proposed rates the return will drop to 6.64%. The rate of return for the 5/8 x 3/4 inch meter class will be only 4.42%. In contrast, the rates of return for the larger meters are: 1 inch meter, 19.38%; 1 1/2 inch meter, 38.75%; 2 inch meter, 17.61%; 3 inch meter, 21.60%; and -4.61% for the 4 inch meter class.

SUN CITY WATER

Sun City Water's overall rate of return at present rates was 0.99%. At the Staff's proposed rates the return will be 6.60%. The rate of return for the 5/8 x 3/4 inch meter class will be a miniscule 0.23%, i.e., essentially break-even, with no return. The rates of return for the larger meters are: 1 inch meter, 12.82%; 1 1/2 inch meter, 19.95%; 2 inch meter, 16.21%; 3 inch meter, 19.57%; and 0.77% for the 4 inch meter class.

SUN CITY WEST WATER

Sun City West Water's overall rate of return at present rates was 4.47%. At the Staff's proposed rates the return will be 6.61%. The rate of return for the 5/8 x 3/4 inch meter class will be only 3.10%. In contrast, the rates of return for the larger meters are: 1 inch meter, 14.35%; 1 1/2 inch meter, 34.94%; 2 inch meter, 25.20%; 3 inch meter, 45.26%; and 91.41% for the 4 inch meter class.

TUBAC WATER

Tubac Water's overall rate of return at present rates was 1.72%. At the Staff's proposed rates the return will be 6.57%. The rate of return for the 5/8 x 3/4 inch meter class will be 7.14%. The rates of return for the larger meters are: 1 inch meter, 3.35%; 1 1/2 inch meter, 5.99%; 2 inch meter, 14.49%; and -3.10% for the 3 inch meter class.

Q. WHAT DOES THE SHIFT IN RATES OF RETURN FROM THE SMALLER METERS TO THE LARGER METERS MEAN?

A. The Staff's proposed rate design (three commodity rate tiers which are inverted) produces a shift in the rate of return from the smaller meters to the larger meters. In fact, for some divisions, Havasu and Anthem as examples, the revenues produced by the smaller meters decrease, while the revenues from the larger meters increase, even though Staff is recommending a reduction in rates. Thus, the revenue requirement is being shifted to customers on larger meters.

The cost of service studies show that Staff's proposed rate design is creating a subsidy that must be paid by the larger users to compensate for the initial 4,000 gallon discounted rate block. Customers who use relatively small amounts of water (for example, below 10,000 gallons a month) are the primary beneficiaries of this subsidy because a significant percentage of their total monthly water use is priced at a discount. The revenues that are lost as a result of the price discount – the subsidy – are recovered by penalizing higher use customers, who are primarily served by larger meters. For this reason, the rates of return for virtually all of the larger meters are well above the overall rate of return. I have included Kozoman Rebuttal Schedule 3 comparing Staff's revenues by meter size at present and proposed rates, which highlights the subsidy Staff proposes.

VI. EXPLANATION OF REBUTTAL SCHEDULES G-8 AND G-9

Q. HOW DID YOU COMPUTE THE MONTHLY MINIMUMS BASED ON METER SIZE?

A. The monthly minimums are based on the flow capacity of each meter with the 5/8 x 3/4 inch meter being the base meter for pricing. The computation of the monthly minimum, in part, involves the following:

1. Rate base by function times the debt and equity component of the capital financing rate base, plus income tax on the equity component;
2. Expenses charged to the particular function, and
3. Depreciation charged to the particular function;

The sum of 1, 2, and 3 relating to customer rate base and expenses is divided by the number of meters (customers) to derive the customer charge. The sum of 1, 2, and 3 for meters and service lines is divided by the number of equivalent meters or services to derive the meter and service line charge.

Schedule G-8, page 1 contains the computed monthly minimum for a 5/8 x 3/4 inch meter, as to customer, meter, and service line based on the following: return on investment in assets (the rate base) for the above functions; income taxes allocated to each function, (income taxes based on the proposed rate of return on equity); the expenses allocated to each function, and depreciation allocated to each function. The demand costs should also be included in the monthly minimum.

However, Schedule G-8, page 1a, contains the same computations as contained on page 1, with the exception that the Staff's proposed rate of return for equity and the inclusion of income taxes on the equity return are omitted. This computation derives the actual cost, without a rate of return or recovery of income taxes. Please note that I am using the actual cost, which includes the cost of debt as well as expenses, but without a return on equity and associated income taxes.

Schedule G-8, page 2, contains the computation to derive the demand charge per equivalent 5/8 x 3/4 inch meter, which includes return on debt and equity, and the income taxes on the equity return, plus expenses. A 6 inch meter would be charged 50 times the demand charge for a 5/8 x 3/4 inch meter.

Schedule G-8, page 2a, contains the computation to derive the demand charge per equivalent 5/8 x 3/4 inch meter, but excludes a return on equity and the

income taxes on the equity return. This computation derives the actual cost, without a rate of return on equity or income taxes.

The computed monthly minimums should consist of the expenses and the return on the rate bases for the functions of customer, meter, service, and demand charges. Without inclusion of rates of return and income taxes, the actual cost, with no profit or debt cost recovery can be computed for the monthly minimum.

The computed monthly minimums are shown with and without Staff's recommended rate of return on equity and income taxes are contained on Schedules G-8, page 3.

Also shown on Schedule G-8, page 3 are Staff's proposed monthly minimums compared to the computed monthly minimums. When the computed monthly minimums, including rates of return and income taxes, are compared to the Staff's proposed monthly minimums, my earlier testimony is borne out that Staff's rates are not cost justified. The 5/8 x 3/4 inch meter rate proposed by the Staff is a fraction of the actual cost to serve the customer when Staff's recommended rates of return and income taxes are included in the computed minimum.

If Staff's recommended rate of return on equity and income taxes are excluded from the computed minimum, Staff's proposed rates as a percentage of the computed monthly minimum increase, but never reach 100%. In other words, Staff's monthly minimums fail to recover basic costs of service even without a return on equity.

Q. BUT, MR. KOZOMAN, AREN'T THE PROFITS, LOSSES AND COSTS YOU JUST CITED DEPENDENT ON HOW THE ALLOCATION FACTORS FOR FUNCTIONS ARE DERIVED ON SCHEDULE G-7, PAGE 2?

A. Yes, the allocations influence the results that are derived on Schedule G-8. As I testified, I am allocating costs to commodity for Wells, Pumping, and Distribution Mains to adhere to past Staff policy. The cost of service allocation factors are 90% to demand and 10% to commodity, for wells, pumping equipment and transmission and distributions lines. To approximately equal Staff's proposed monthly minimum for the 5/8 x 3/4 inch meters, the allocation factors for each division need to be changed to:

	Allocation Factor Used in Cost of Service Study	Allocation Factor to Match ACC Staff's Monthly Minimum
Agua Fria		
Demand Allocation Factor	90%	**-25%**
Commodity Allocation Factor	10%	125%
Anthem Water		
Demand Allocation Factor	90%	**-2%**
Commodity Allocation Factor	10%	102%
Havasu Water		
Demand Allocation Factor	90%	**-55%**
Commodity Allocation Factor	10%	155%
Mohave Water		
Demand Allocation Factor	90%	**-115%**
Commodity Allocation Factor	10%	215%
Sun City Water		
Demand Allocation Factor	90%	**-75%**
Commodity Allocation Factor	10%	175%

Sun City West Water		
Demand Allocation Factor	90%	**-60%**
Commodity Allocation Factor	10%	160%
Tubac Water		
Demand Allocation Factor	90%	13%
Commodity Allocation Factor	10%	87%

The negative allocations are highlighted with bold font. Obviously, the allocation factors to approximately match the Staff's proposed monthly minimums aren't reasonable.

Q. PLEASE CONTINUE WITH YOUR TESTIMONY ON COST RECOVERY.

A Schedule G-8, page 4, contains the computation to derive the computed commodity rate, which does include Staff's recommended rate of return on equity and income taxes. The commodity rate proposed by Staff produces a profit, however, because the first tier commodity rate is discounted, the Company will make no profit from customers using only 4,000 gallons. The loss that the Company will experience due to the Staff's proposed monthly minimums, which are well under cost as shown above, is exacerbated by the discount for all usage up to 4,000 gallons per month.

Schedule G-8, page 4a contains the computation to derive the computed commodity rate, which excludes Staff's recommended rates of return and income taxes. This rate is what it actually costs the Company's water district to produce the water per 1,000 gallons.

Q. PLEASE CONTINUE WITH YOU EXPLANATION OF THE G-9 COST OF SERVICE SCHEDULES.

A. Schedule G-9 consists of two pages. Page 1 contains the computed monthly minimum and commodity rate, again <u>without</u> Staff's proposed rate of return and

income taxes for illustrative purposes. For the Company to just meet its costs (no equity return, and no recovery of income taxes), a customer on a 5/8 x 3/4 inch meter must use more than the average monthly water usage or, in very few cases, slightly below the average usage (Mohave and Sun City West). This means that the Company will not collect the revenue required from the average residential user, i.e., the average residential user is being subsidized.

Page 2 of Schedule G-9 contains the computed monthly minimum and commodity rate with Staff's proposed rate of return and income taxes. For the Company to recover it expenses, recover the Staff's recommended equity return, and recover income taxes on the equity return, a customer on a 5/8 x 3/4 inch meter must use over the monthly average usage. These computed costs are from Schedule G-8, page 4, compared to the revenue generated by the Staff's proposed rates.

As the bulk of the Company's customers are residential customers on 5/8 x 3/4 inch meters, it is apparent that under Staff's proposed rates, only customers using greater quantities of water than the monthly average usage are profitable users.

Q. ARE YOU SAYING THEN THAT THE COMPANY CAN'T MAKE A PROFIT ON CUSTOMERS ON A 5/8 X 3/4 INCH METER WHO ARE USING THE AVERAGE QUANTITY OF WATER EACH MONTH?

A. That is exactly what I am saying. At average usage, the Company will lose money on residential customers on the 5/8 x 3/4 inch meter, in most of its water districts. And to clarify a point, debt cost is included in the computed monthly minimum and commodity rates without the Staff's proposed return and income taxes. Thus, the Company loses money for most residential customers on the 5/8 x 3/4 inch meters using the average monthly usage.

Q. COULD YOU PROVIDE A SUMMARY OF THE USAGE NECESSARY, BY WATER DISTRICT, FOR THE COMPANY TO JUST BREAK EVEN, AND ACTUALLY EARN STAFF'S PROPOSED EQUITY RETURN?

A. Yes.

	Aqua Fria	Havasu	Mohave
Gallons that must be used to Recover Costs	8,066	13,805	8,145
Gallons that must be used to Recover Costs and Profit	12,040	17,585	10,760
Average Usage	7,002	7,650	8,787
Percentage of Customers On 5/8 x 3/4 Inch Meter	92.19%	98.32%	94.93%

	Sun City	Sun City West	Tubac
Gallons that must be used to Recover Costs	11,515	6,795	7,952
Gallons that must be used to Recover Costs and Profit	15,335	10,170	12,260
Average Usage	8,361	7,171	13,177
Percentage of Customers on 5/8 x 3/4 Inch Meter	88.10%	93.43%	92.51%

Q. WHY ISN'T ANTHEM INCLUDED IN YOUR DATA?

A. I omitted Anthem because it is a special case. Del Webb entered into an agreement with Citizens to make certain payments, beginning in 2004, which have the effect of subsidizing rates in that district. Without including these payments, the Staff's proposed rates would not recover costs in Anthem, either.

Q. I THOUGHT STAFF WAS USING 2001 REVENUES AND EXPENSES, EVEN THOUGH, AS MR. BOURASSA EXPLAINS, CITIZENS' 2001 EXPENSES WERE NOT NORMAL?

A. Yes, that is Staff's recommended approach. However, Staff has chosen to include the Del Webb 2004 payment to reduce the revenue requirement in Anthem even though doing so is not consistent with its position on expense adjustments.

Q. WOULD YOU SUMMARIZE THE IMPACT OF THE STAFF'S PROPOSED RATES?

A. If the purpose of Staff's rate design is to encourage water conservation, then Staff has failed. This rate design does not encourage conservation because of the initial 4,000 gallon discounted rate block, and may destablize revenues and the Company's earnings because a significant portion of the revenue requirement would be shifted to a relatively small number of customers using over 100,000 gallons monthly. If those customers do conserve (or leave the system), the Company's revenues may decline substantially. This is a very poor rate design.

Q. WOULD A COST OF SERVICE STUDY USING THE COMPANY'S PROPOSED PLANT AND EXPENSES RESULT IN MONTHLY MINIMUMS AS HIGH OR HIGHER THAT WHAT IS COMPUTED IN YOUR COST OF SERVICE STUDY USING ACC STAFF PLANT, EXPENSES, AND RATE OF RETURN?

A. Yes. The Company's plant, expenses, and proposed rate of return are higher than what the Staff is recommending. Therefore, the Company's monthly minimum charges would be higher than what I computed using the Staff's values.

Q. IS THE COMPANY REQUESTING MONTHLY MINIMUMS AS HIGH AS IS SHOWN IN YOUR COST OF SERVICE STUDIES?

A. No, the Company is not requesting monthly minimums as high as I computed in the cost of service study. This is because the Company is proposing to retain the same general rate design that was approved in the prior Citizens cases in order to simplify the rate case.

Q, MR. ROGERS TESTIFIES THAT THE MULTI-UNIT BILLING AT HAVASU AND MOHAVE WATER SHOULD BE RE-EXAMINED IN A FUTURE RATE CASE. WOULD YOU PLEASE COMMENT THIS?

A. The multi-unit, multi-family billing is computed based on the number of households served by the meter multiplied by the monthly minimum charged for a 5/8 x 3/4 inch meter customer. Additionally, these customers receive the number of gallons included in the monthly minimum multiplied by the gallons included for a 5/8 x 3/4 inch meter. In the prior rate case for the Mohave water district, Citizens proposed changing how the multi-unit customers were billed. However, the Staff recommended that the current billing method be retained, and the Commission agreed.

If multi-unit customers were billed based on meter size, the revenues from these customers would decrease. The result would be that all other customers would have to make up the decrease in revenues. While the Company is not opposed to modifying the rate structure for these customers, one must remember that this would require other customers to pay higher rates to make up the resulting revenue shortfall.

VII. RUCO'S PROPOSED RATE DESIGN

Q. DOES THE COMPANY AGREE WITH THE PROPOSED RATE DESIGNS BY STAFF OR RUCO?

A. RUCO proposes rate increases and decreases allocated essentially evenly across the customer groups (with some exceptions, as I will discuss). This is the same

method used by the Company to allocate proposed rate increases. RUCO is proposing to eliminate any gallons included in the monthly minimum for the Havasu and Mohave water districts.

Q. WOULD YOU PLEASE COMMENT ON RUCO'S PROPOSED RATES FOR SUN CITY WATER?

A. RUCO is proposing a very slight decrease in the monthly minimums charged to the irrigation customers, approximately 0.002% to 0.013%. However, the proposed commodity rate for the irrigation customer class would increase by a whopping 201%! This causes an overall 161% increase in the proposed rates from the irrigation customer class. RUCO's proposed commodity rate increases for public interruptible water and construction water also approach 200%. The public interruptible increase is 198%.

To put RUCO's rate design into perspective, the increase in revenue that RUCO recommends for this water district is $1,963,334. The irrigation customer class provides approximately $356,000 of the rate increase. The irrigation customer class provides 4% of the total present revenues (excluding miscellaneous revenues), but will provide over 18% of the revenue increase under RUCO's proposal.

The 5/8 x 3/4 inch residential meter customers are proposed by RUCO to have an increase of approximately 20%. In contrast, residential customers on a 1 inch meter face increases of 28.5%, and commercial customers on a 4 inch meter face increases of 37%.

Q. MR. KOZOMAN, ARE THERE ANY OTHER PROBLEMS WITH RUCO'S RECOMMENDATIONS FOR SUN CITY WATER?

A. Yes. RUCO is proposing that all of the revenue increase be recovered by means of an increase in the commodity rate. The monthly minimums would not change.

This methodology violates basic cost of service principles, for the reasons I have already given.

Q. WOULD THE COST OF SERVICE STUDY YOU PREPARED USING STAFF'S PLANT AND EXPENSES JUSTIFY NO INCREASE IN THE MONTHLY MINIMUM, AND RECOVERING ALL OF THE REVENUE INCREASE BY INCREASING THE COMMODITY RATES?

A. Definitely not. While RUCO proposes a slightly lower rate base, the expenses are approximately equal to the expenses proposed by the Staff. The results produced by a cost of service study using RUCO's proposed plant and expenses would produce results similar to the cost of service study I prepared using the Staff's values. The cost of service study for the Sun City water district shows the monthly minimum to be $17.21, including the Staff's proposed rates of return and income taxes, and $14.37 without any rate of return and recovery of income taxes.

RUCO's proposed increase to only the commodity rates is not cost justified. The Sun City commodity rate from the cost of service study was $0.3757 per 1,000 gallons. RUCO's proposed commodity rate of $1.96 for the irrigation customer class, compared to $0.99 and $1.29 for the residential and commercial customers, respectively, cannot be supported by the cost to provide the commodity. By only increasing the commodity rate, RUCO is attempting to shift the revenue increase to larger users.

Q. WOULD YOU PLEASE COMMENT ON RUCO'S PROPOSED RATES FOR SUN CITY WEST WATER?

A. RUCO's proposed revenue increase for the Sun City West water district is again allocated to the commodity rates only. Once again, this would shift the rate increase to the larger users. As an example, the revenue increase allocated to the 5/8 x 3/4 residential customer class is approximately 13%, while the revenue

increases allocated to the larger meters for both residential and commercial customers range from 16.15% to 22.97%. Of course, this shifts the percentage of the total dollars the 5/8 x 3/4 residential customer class pays at present and proposed rates.

Q. WOULD THE COST OF SERVICE STUDY YOU PREPARED USING THE STAFF'S PLANT AND EXPENSES JUSTIFY NO INCREASE IN THE MONTHLY MINIMUM, AND RECOVERING ALL OF THE REVENUE INCREASE BY INCREASING THE COMMODITY RATES?

A. Once again, it would not. While RUCO proposes a slightly lower rate base for Sun City West, RUCO's recommended expenses for that water district are higher than the expenses recommended by the Staff. The results produced by a cost of service study using RUCO's proposed plant and expenses would produce results similar to the cost of service study prepared using the Staff's values. The cost of service study for the Sun City West water district shows the monthly minimum to be $13.03, including the Staff's proposed rate of return and income taxes, and $10.05 without any rate of return and income taxes.

Consequently, RUCO's proposed increase to only the commodity rates is not cost justified. The commodity rate from the cost of service study was approximately $0.35. RUCO's proposed commodity rates of $1.14 and $1.38, respectively, to the residential and commercial customers cannot be supported by the cost to provide the commodity.

Q. WOULD YOU COMMENT ON RUCO'S PROPOSED RATE DESIGN FOR SUN CITY WEST WASTEWATER?

A. For the Sun City West wastewater district, Mr. Moore proposes that the commodity rate charged to the large commercial customer class be increased by 155%, which results in an increase to this customer class of 129%. The other

customers on the wastewater system will be paying an increase of approximately 28%. Once again, RUCO is ignoring cost of service principles, and attempting to shift revenue recovery to larger commercial customers.

Q. DID RUCO PROPOSE KEEPING THE EXISTING MONTHLY MINIMUMS FOR THE AGUA FRIA, ANTHEM, HAVASU, MOHAVE AND TUBAC WATER DIVISIONS, AND INCREASING OR DECREASING THE COMMODITY RATES?

A. In the Agua Fria water division, for which RUCO recommends a rate decrease, the monthly minimums would be decreased by 14.80%. The first commodity rate would be decreased by 32%, while the second commodity rate would be decreased by 19.64%.

In the Anthem water district, for which RUCO recommends a rate decrease, the monthly minimums would be decreased by 25%. The commodity rate would be decreased by 18.50%.

In the Havasu water division, for which RUCO recommends a small rate increase, the monthly minimums would be increased by 25%, with the elimination of 1,000 gallons of water that are presently included in the monthly minimum, while the commodity rate would be increased 21%. The increase in the monthly minimum is 25% because a customer on the 5/8 x 3/4 inch meter is currently paying $10.00, which includes 1,000 gallons of water. With RUCO's proposed monthly minimum of $10.75, plus the cost of 1,000 gallons of water at RUCO's proposed rate of $1.72, the bill for a customer using 1,000 gallons of water will now be $12.47, or an increase of approximately 25%.

In the Mohave water division, for which RUCO recommends a rate decrease, the monthly minimums would be decreased by approximately 2% with the elimination of the 1,000 gallons of water that are presently included in the

monthly minimum, while the commodity rate would be decreased 16%. There is an increase in the monthly minimum because a customer on the 5/8 x 3/4 inch meter is currently paying $8.65, which includes 1,000 gallons of water. With RUCO's proposed monthly minimum of $7.45, plus the cost of 1,000 gallons of water at RUCO's proposed rate of $1.24, the bill for a customer using 1,000 gallons of water will now be $8.69, or a very slight increase.

In the Tubac water division, for which RUCO recommends a rate increase, the monthly minimums would be decreased by approximately 2% while the commodity rates would be increased by approximately 28%.

Q. THERE DOES NOT SEEM TO BE ANY LOGICAL METHODOLOGY AT WORK HERE, MR. KOZOMAN.

A. That is correct. There is no consistent rate design approach from one district to another. It appears that Ms. Diaz Cortez and Mr. Coley worked together on the rates some of the time, and attempted to spread the rate increase or decrease uniformly across the monthly minimum charges and commodity rates, while Mr. Moore worked independently of the remainder of RUCO's staff.

Q. ARE THERE ANY DIFFERENCES BETWEEN RUCO'S RECOMMENDED REVENUES AND WHAT YOU COMPUTE BASED ON RUCO'S RATES?

A. Yes, there are several significant differences. I compute total revenues from the Havasu system of $546,287 under RUCO's proposed rates, rather than RUCO's amount of $443,391. I compute total revenues from the Mohave system of $3,936,470 under RUCO's proposed rates, rather than RUCO's amount of $3,604,638. For Anthem/Agua Fria wastewater district, my bill count workbook produces revenues of $2,031,292 as opposed to RUCO's proposed revenues of

$1,941,199. For the Agua Fria water district, my bill count workbook produces revenues of $5,358,091 as opposed to RUCO's proposed revenues of $5,672,666.

Q. RUCO WITNESS RODNEY MOORE COMMENTED IN HIS TESTIMONY ABOUT PROBLEMS WITH THE COMPANY'S WORK PAPERS. DO YOU HAVE ANY COMMENTS ON THIS TESTIMONY?

A. Mr. Moore called both Mr. Bourassa and me when he had questions. One question he asked about concerned hidden rows in the bill counts. To be able to print out schedules from the bill counts, I had to hide rows. When I copied the files to provide them to the Staff and RUCO, I did not "un-hide" the rows. I apologize if this caused a problem. It was not intentional.

I should note that it took two weeks to obtain RUCO's work papers. I received duplicate computer files labeled "Mohave Water" and "Havasu Water." Both computer files were identical, and neither file contained either Mohave or Havasu data. The data programs were for New River Utility Company. Additionally, I received blank computer files, and files which could not be opened. The bill counts for Havasu and Mohave were received at the end of the two week period mentioned above. However, these bill counts were unusable, as RUCO completes a full workbook or bill count for each meter size and/or rate classification. Mohave had over 90 bill counts, without the benefit of linking the workbooks together. In other words, summary schedules are hard-coded (manually inputted). Time did not permit me to check these files.

The point here is that in a large and complicated rate case like this one, problems do develop. I don't believe RUCO deliberately attempted to delay production of its work papers to the Company, any more than I would deliberately "hide" columns in my work papers. It is unfortunate that Mr. Moore chose to bring this up as he did.

VIII. MISCELLANEOUS

Q. DO YOU HAVE REBUTTAL CONCERNING DIRECT TESTIMONY ON THE ANTHEM/AGUA FRIA, SUN CITY, AND SUN CITY WEST WASTEWATER DISTRICTS?

A. No. Both Staff and RUCO are generally spreading their proposed rate increase or decrease across the board, which is the same methodology proposed by the Company. The only major exception is RUCO's recommendation for Sun City West, which, as discussed, attempts to shift the revenue increase to the commercial larger customers without regard to the cost of service. However, the Company does not agree with either the Staff or RUCO's rates, which is a function of the parties' disagreement over each wastewater district's revenue requirement.

Q. WOULD YOU COMMENT ON YOUNGTOWN'S REQUEST TO BE INCLUDED ON THE IRRIGATION TARIFF FOR THE SUN CITY SERVICE AREA?

A. The Company does not oppose Youngtown's request. It should be understood, however, that if the Commission authorizes Youngtown to be included on the lower cost irrigation rate, then the rates for other customers must be increased slightly to make up for the shortfall in revenue. Kozoman Rebuttal Schedule 4, based on water usage for the period from October 2002 through September 2003, contains the billing at the present rates for a commercial customer on a 2 and 3 inch meter compared to the billing if these meter sizes were billed as irrigation customers. I have included the Company's present and proposed rebuttal rates, the Staff's proposed rates, and RUCO's proposed rates on pages 1, 2, and 3 respectively.

Because RUCO has proposed a substantial increase for irrigation water for the Sun City water district, as discussed above, Youngtown would experience a

lower water expense as a commercial customer, rather than as an irrigation customer, if RUCO's rates were adopted by the Commission. The Company does not know whether Youngtown supports RUCO's recommended rate design for the Sun City water district and, if so, whether Youngtown still wishes to be reclassified as an irrigation customer.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

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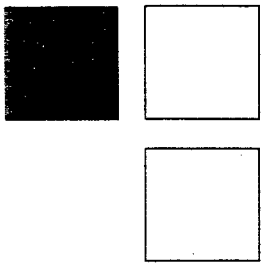
KOZOMAN REBUTTAL EXHIBIT 1

Alternative Rates

AWWA MANUAL M34

First Edition

American Water Works Association



Chapter 3

Lifeline Rates and Low-Income Discounts

INTRODUCTION

Lifeline rates and low-income discounts are rate alternatives designed to provide a minimal or essential volume of water service at a reduced cost to those residential customers who, due to their income level, find it difficult to afford water service.

Both lifeline rates and low-income discounts address social welfare concerns. The propriety of a water utility's involvement in this role may be controversial. Some argue that this role is better and more efficiently achieved by governmental agencies specially designed for that function. Others believe that the advancement of accepted governmental policies is an appropriate role for any and all governmental units and investor-owned water utilities that are granted exclusive franchise service rights by the government.

Determining Rates

A lifeline rate structure provides an initial, below-cost rate for a specified volume of water. The volume of water billed at the lifeline rate is set at a level that represents the perceived minimal sanitary requirements for the residential customers it is intended to benefit. A low-income discount simply provides for a percentage discount from the normal rates. The discount can be applied to some or all of the water bill and can be set to ensure that the average water bill does not exceed a specified percentage of poverty-level income.

Eligibility

Lifeline rates or low-income discounts should only be offered to customers who meet preestablished income eligibility requirements. In some cases, when lifeline rates were first established, the lower lifeline rate was applied to all customers. The assumption was that low-income customers used less water than other customers,

which may not necessarily be true. As a result, all customers received the benefit of the reduced rates. The subsidy provided by the reduced rates was recovered through higher rates in all other usage blocks. Low-income customers who used more than the established lifeline volume allowance actually payed higher water bills due to the higher cost of the nonlifeline-priced water.

There are three primary considerations that must be addressed in setting lifeline rates or low-income discounts for residential customers.

- What is the appropriate level of water use used to determine the minimum sanitary level?
- Who should be offered the lifeline rates or low-income discounts?
- What amount of discount in the rates is warranted?

Minimum sanitary level. The minimum sanitary level of water use is not a single volume for all customers. Utilities that wish to adopt lifeline rates must determine the appropriate level of water use, recognizing that low-income households will consist of varying numbers of occupants resulting in varying minimal water requirements. This can make a lifeline program difficult to administer.

Participants. Lifeline rates and low-income discounts should not be offered to all residential customers. Only those customers that meet preestablished income eligibility criteria should be offered these rate alternatives. The determination of an appropriate income level at which to offer the alternative is a local utility decision. The use of the federal poverty level for a family of four can be a reasonable suggested starting point. Since family sizes vary, using a percentage of this measure, for example 150 percent of the federal poverty level for a family of four, may be useful for determining eligibility.

Determination of discounts. The determination of the amount of the discount or subsidy to offer is also a subjective decision that must be made at the local level. A determinant that may be considered is the annual household water bill as a percentage of typical household income. The lifeline rates or discount would be set at a level such that the annual water bill would not exceed some percentage of estimated household income.

Lifeline rates might be better administered by collecting family size and household income information. This would allow both income eligibility and the quantity of water provided at lifeline rates to be related to household size.

Applications

Lifeline rates or low-income discounts may be considered in the following situations:

- The local cost of water service is high relative to other similar water utilities.
- A significant percentage of residential customers are perceived to be unable to afford water service.

Evaluation and study should be performed to make sure that both these conditions exist in sufficient magnitude to justify further consideration of such rates.

The use of lifeline rates and low-income discounts should be discouraged in areas with extreme water shortages and where water use is of concern. This alternative may encourage greater use among the eligible customers and therefore be inconsistent with the need to reduce water consumption. In this case, the benefits to customers whose water costs might be reduced would have to be weighed against water use concerns.

ADVANTAGES AND DISADVANTAGES

Financial Sufficiency

Lifeline rates and low-income discounts do not present a major obstacle to revenue stability, though they may be less stable than some other rate alternatives. If the rates are properly developed, the revenues recovered under the lifeline rate or low-income discount should be reasonably stable because consumption has been set for minimum requirements. However, a key consideration is to determine how to recover the subsidies provided by the rate. The subsidy could be recovered only from the residential class. If the revenues recovered under rates for other classes do not include any subsidy for the lifeline or discounted rates, the revenues under the nondiscounted rates will then correspond well to changes in consumption levels or utility operating conditions.

Equity

Since lifeline rates and low-income discounts involve subsidized rates to certain residential customers, those particular customers do not contribute their relevant share of costs. Ineligible customers generally bear noncost-based price increases to provide the subsidy. If possible, the lifeline rate should be established so that all variable production costs are recovered.

Impact on Customers

The adoption of this rate alternative results in decreased water bills for those customers eligible for the lifeline rate or the low-income discount. Ineligible customers would encounter increased water bills. The amount of increase to these customers would depend on: (1) the relative number of customers being subsidized through the lifeline or low-income discount rates; (2) the amount of the subsidy that was granted; and (3) the method for recovering the subsidy from other customers or classes. In some cases, the number of eligible customers is relatively small, as is the amount of the subsidy. As a result, the impact on the nonsubsidized customers may be relatively insignificant.

Simplicity

While the concept and application of this rate alternative is relatively easy for customers to understand, the eligibility criteria may seem confusing.

Implementation

The implementation of lifeline rates or low-income discounts is particularly complex. This is one of its major problems. While the design of the rates is straightforward, the determination of several key factors is difficult. Those factors include:

- The minimum sanitary requirement to which the rate alternative would apply.
- Income eligibility criteria. The varying number of household inhabitants compounds this problem.
- The level of subsidy to allow. While the US government publishes poverty level statistics, these vary by household size. In any case, the subsidy should be of sufficient magnitude to provide adequate relief to the intended customers.
- The additional cost of administering the program, including personnel to create, implement, and operate the programs, and changes to the billing and collection

system. The cost of administering the program should be evaluated against the cost of the benefits to the targeted customers. If costs exceed benefits, simple direct payments to targeted customers might be an alternative to consider.

Once the rates are determined, the administration of lifeline rates and low-income discounts is made difficult due to the income verification procedures that are necessary. Not only do customer income levels need to be initially determined, but they should be verified periodically to ensure continued eligibility. Local agencies that provide other forms of assistance may be useful in this endeavor.

Conservation

Lifeline rates and low-income discounts provide no conservation or water reduction incentive to those that receive the subsidy. Since water is sold below cost, the pricing incentive to reduce consumption is lessened. Water use among the subsidized customers could increase, especially during peak periods. The impact on demand should be carefully considered in areas where water supplies are scarce.

Since the impact on those not receiving the lifeline or low-income subsidy is typically minimal, there is little to no conservation impact on these customers.

HISTORICAL PERSPECTIVE

Lifeline rates for electric utility service were considered by numerous state public service commissions in the early 1980s as one of the requirements of the 1978 Public Utility Regulatory Policy Act (PURPA). As the cost of water increases, lifeline rates are being considered by the water utility industry with greater frequency. These rate structures, however, have been the source of controversy among rate technicians in the electric, gas, and telephone industries. As a result, lifeline rates have not been widely adopted by these utilities.

EXAMPLE

Rate Determination

A lifeline rate structure determination is presented below. In this example, it is assumed that 40 gal per capita per day is a minimum sanitary requirement. For a household of four, this results in annual water use of 60,000 gal (5000 gal per month). The utility has also determined that customers with annual incomes at or below $9000 should become eligible for a lifeline water rate and that there are 200 such households in the service area. Because the utility chose a fairly low eligibility level when compared to the federal poverty level, it decided that the annual water bill with minimum sanitary usage should not exceed 1 percent of the annual income or $90 per year.

Under the current water rates, a household using 60,000 gal per year would have an annual water bill of $105.60 based on an annual service charge of $47.40 and a usage charge of $58.20. As shown on Table 3-1, the annual water bill would have to be reduced by $15.60 to achieve the desired annual bill of $90 for eligible low-income customers.

The utility has chosen to affect the entire reduction through the consumption or usage charges, rather than reducing its service charges. As a result, the annual usage charge would have to be reduced from $58.20 per year to $42.60 per year to achieve the annual reduction of $15.60. Table 3-2 shows the lifeline rate of $0.710 for the first 5000 gal per month would result in annual usage charges equal to the goal of $42.60.

Table 3-1 System Characteristics and Assumptions

Minimum Sanitary Use	60,000 gal/year 5000 gal/month
Eligibility (Income)	≤$9000 per year
Estimated Eligible Customers	200
Desired Maximum Annual Water Bill:	
One percent of eligible income ($9000/year)	$90/year water bill
Annual Charge Under Current Rates:	
Service charge	$47.40
Water use (5000 gal/month)	58.20
Total	$105.60
Necessary Reduction to Annual Bill	$15.60

Table 3-2 Calculation of Lifeline Rate

Current Consumption Charge Revenue	$58.20
Required Reduction	15.60
Revised Consumption Charge Revenue	$42.60
Calculation of Lifeline Rate:	
Revenue	$42.60
Usage	60,000 gal/year
Rate/thous gal	$0.710
Calculation of Lifeline Subsidy:	
Number of eligible accounts	200
Total subsidy	$3120
Increase in Other Rates Required	0.148%

	Current Rates	Lifeline Rates	
		Eligible*	Ineligible
First 5000 gal/month	$0.970	$0.7100	$0.9714
Next 10,000 gal/month	0.970	0.9714	0.9714
Next 1,485,000 gal/month	0.860	0.8613	0.8613
Over 1,500,000 gal/month	$0.680	$0.6810	$0.6810

*Applies only to customers meeting income eligibility requirements.

Subsidy Required

The next step in the calculation of the lifeline rates is to determine the amount of subsidy that the reduced lifeline rate requires and how all other rates should be adjusted to produce this subsidy. Having determined that 200 households are eligible for the lifeline rates, the utility can calculate the amount of revenues that would be lost under this alternative. It is assumed that all 200 eligible households will use the minimum volume of 5000 gal per month. The annual lost revenues from this subsidy is determined by multiplying 200 by the per account subsidy of $15.60 to derive a total annual subsidy of $3120. To recover this from all other customers will require an across-the-board increase in the nonlifeline rates of 0.148 percent.

Table 3-2 presents the current rates and lifeline rates that result from this calculation. The utility has added an extra initial rate block for the first 5000 gal per

Table 3-3 Impact of Lifeline Rate

Meter Size *in.*	Monthly Usage ft^3	Monthly Usage *thous gal*	Current Cost/ Month*	Cost With Lifeline/ Month*	Increase	Percent Increase
5/8	0	0.000	$3.95	$3.95	$0.00	0.0
5/8	500	3.740	7.58	7.58	0.00	0.0
Lifeline	668	5.000	8.80	7.50	−1.30	−14.8
5/8	1000	7.480	11.21	11.22	0.01	0.1
5/8	3000	22.440	24.90	24.93	0.03	0.1
2	50,000	374.000	330.34	330.82	0.48	0.1
4	1,000,000	7480.000	5383.35	5391.26	7.91	0.1
8	1,500,000	11,220.000	$7951.25	$7962.91	$11.66	0.1

*Includes service charges as follows:

Meter Size—*in.*	Monthly Charge
5/8	$3.95
2	7.05
4	25.30
8	$50.00

month at the calculated lifeline rate. This rate would be available only to customers that met income eligibility requirements. It should be noted that customers eligible for the lifeline rate begin paying the normal or "ineligible" rates after their usage exceeds the minimum use of 5000 gal per month. All customers ineligible for the lifeline rate pay the same rate for the first two rate blocks.

Table 3-3 presents the impact of the lifeline example presented above. As stated earlier, the impact on noneligible customers is typically minimal, but depends on numerous factors.

The example allocated the lifeline rate subsidy to all other customers. It is preferable to allocate the subsidy only to the residential class.

Low-Income Discount

With a low-income discount, the utility's rates or bills are discounted for eligible customers, typically across the board. It is possible to discount only the consumption charges or a portion of the consumption charges (up to 5000 gal per month, for example). As with the lifeline rates, the subsidy provided by the discount would have to be allocated back to the other customers to ensure that the utility recovers its total revenue requirements.

SUMMARY

Lifeline rates and low-income discounts may be more widely used as the cost of water service grows relative to other goods and services. Since water is considered a necessity, many utilities may decide that arrangements to provide minimal quantities of service to those customers otherwise unable to afford service is a proper utility function. In developing lifeline rates or low-income discounts, utilities should develop rates that ensure that only eligible customers receive the benefits and that the determination of discount amounts and/or use allowances are properly reflected. This will ensure that subsidies provided by this rate alternative do not unfairly burden other customers. The utility must also weigh the benefits received against the cost of administering the program.

KOZOMAN REBUTTAL SCHEDULES

Arizona American
Test Year Ended December 31, 2001
Index of Rebuttal Schedules for
Ronald L. Kozoman, CPA

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Arizona American
Test Year Ended December 31, 2001
Comparison of Present and Company Proposed Rebuttal Revenues, ACC Staff Proposed Revenues and RUCO Proposed Revenues

Exhibit
Kozoman Rebuttal Schedule 1
Page 1
Witness: Kozoman

Line No.	Division	Present Revenues	Company Proposed Rebuttal Revenues	Company Dollar Increase (Decrease) From Present Revenues	Company Percent Increase (Decrease) From Present Revenues	ACC Staff Proposed Revenues	ACC Staff Dollar Increase (Decrease) From Present Revenues	ACC Staff Percent Increase (Decrease) From Present Revenues	RUCO Staff Proposed Revenues	RUCO Staff Dollar Increase (Decrease) From Present Revenues	RUCO Staff Percent Increase (Decrease) From Present Revenues
1											
2	Agua Fria Water	6,183,467	6,302,757	119,289	1.93%	5,313,715	(872,322)	-14.10%	5,572,666	(613,371)	-9.92%
3											
4	Anthem Water	4,006,408	4,025,066	18,658	0.47%	3,422,291	(588,514)	-14.67%	3,586,679	(424,126)	-10.57%
5											
6	Antherm / Agua Fria										
7	Wastewater	1,863,188	2,186,787	323,599	17.37%	1,793,061	(73,485)	-3.94%	1,941,195	74,649	4.00%
8											
9	Havasu Water	440,924	569,225	128,301	29.10%	409,727	(31,197)	-7.08%	443,391	2,467	0.56%
10											
11	Mohave Water	4,394,133	4,590,694	196,561	4.47%	3,710,046	(684,729)	-15.58%	3,604,636	(790,139)	-17.98%
12											
13	Sun City Water	6,179,363	10,543,503	4,364,140	70.62%	8,121,786	1,928,696	31.14%	8,156,424	1,963,334	31.70%
14											
15	Sun City Wastewater	5,087,862	5,404,262	316,400	6.22%	4,281,300	(807,040)	-15.86%	4,193,565	(894,775)	-17.58%
16											
17	Sun City West Water	3,365,549	4,581,390	1,215,842	36.13%	3,769,603	388,829	11.50%	3,860,482	479,708	14.19%
18											
19	Sun City West										
20	Wastewater	3,531,477	5,140,333	1,608,856	45.56%	4,663,747	1,128,067	31.91%	4,563,072	1,027,392	29.06%
21											
22	Tubac Water	253,812	439,919	186,106	73.32%	342,903	88,417	34.74%	295,298	40,812	16.04%
23											
24	Total Revenues	35,306,183	43,783,936	8,477,752	24.01%	35,828,179	476,722	1.35%	36,217,408	865,951	2.45%

Arizona American / Agua Fria Water Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
Page 2
Witness: Kozoman

Line No.			Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent Increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	5/8 x 3/4 Inch		$ 10.00	$ 10.20	$ 0.20	2.00%	$ 8.52	$ (1.48)	-14.80%	$ 8.25	$ (1.75)	-17.50%
2	3/4 Inch		15.00	15.30	0.30	2.00%	12.78	(2.22)	-14.80%	11.90	(3.10)	-20.67%
3	1 Inch		25.00	25.50	0.50	2.00%	21.30	(3.70)	-14.80%	20.00	(5.00)	-20.00%
4	1 1/2 Inch		53.00	54.06	1.06	2.00%	45.15	(7.85)	-14.81%	43.70	(9.30)	-17.55%
5	2 Inch		80.00	81.60	1.60	2.00%	68.16	(11.84)	-14.80%	65.80	(14.20)	-17.75%
6	3 Inch		155.00	158.10	3.10	2.00%	132.06	(22.94)	-14.80%	128.20	(26.80)	-17.29%
7	4 Inch		200.00	204.00	4.00	2.00%	170.41	(29.59)	-14.80%	165.00	(35.00)	-17.50%
8	6 Inch		400.00	408.00	8.00	2.00%	340.82	(59.18)	-14.80%	330.00	(70.00)	-17.50%
9	8 Inch		800.00	816.00	16.00	2.00%	681.64	(118.36)	-14.80%	660.00	(140.00)	-17.50%
10	Prison, 4 Inch Meter Rate		200.00	204.00	4.00	2.00%	170.41	(29.59)	-14.80%	200.00	-	0.00%
11	4 Inch Private Fire		30.00	30.60	0.60	2.00%	25.56	(4.44)	-14.80%	24.75	(5.25)	-17.50%
12	6 Inch Private Fire		45.00	45.90	0.90	2.00%	38.34	(6.66)	-14.80%	38.00	(7.00)	-15.56%
13	8 Inch Private Fire		60.00	61.20	1.20	2.00%	51.12	(8.88)	-14.80%	49.50	(10.50)	-17.50%
14	10 Inch Private Fire		120.00	122.40	2.40	2.00%	102.25	(17.75)	-14.79%	99.00	(21.00)	-17.50%
15	12 Inch Private Fire		180.00	183.60	3.60	2.00%	153.37	(26.63)	-14.79%	148.50	(31.50)	-17.50%
16	Gallons In Minimum											
17	All (except construction, prison, public interruptible)		-	-			-			-		
18	Construction		-	-			-			-		
19	Prison		-	-			-			-		
20	Public Interruptible		-	-			-			-		
21	**Tier 1:** Gallons / upper limit											
22	All (except construction, prison, public interruptible)		8,000	8,000	N/A	N/A	4,000	(4,000)	-50.00%	8,000	-	N/A
23	Construction		Infinite	Infinite	N/A	N/A	Infinite	N/A	N/A	Infinite	Infinite	N/A
24	Prison		Infinite	Infinite	N/A	N/A	Infinite	N/A	N/A	Infinite	Infinite	N/A
25	Public Interruptible		Infinite	Infinite	N/A	N/A	Infinite	N/A	N/A	Infinite	Infinite	N/A
26	**Tier 2:** (Gallon upper limit, up to, but not exceeding)											
27	All (except construction, prison, public interruptible)		Infinite	Infinite	N/A	N/A	100,000			Infinite	Infinite	N/A
28	Construction		Infinite	Infinite	N/A	N/A	Infinite	N/A	N/A	Infinite	Infinite	N/A
29	Prison		Infinite	Infinite	N/A	N/A	Infinite	N/A	N/A	Infinite	Infinite	N/A
30	Public Interruptible		Infinite	Infinite	N/A	N/A	Infinite	N/A	N/A	Infinite	Infinite	N/A
31	**Tier 3:** (Gallon over)											
32	All (except construction, prison, public interruptible)		Infinite	Infinite	N/A	N/A	Infinite			Infinite	Infinite	N/A
33	Construction		Infinite	Infinite	N/A	N/A	Infinite	N/A	N/A	Infinite	Infinite	N/A
34	Prison		Infinite	Infinite	N/A	N/A	Infinite	N/A	N/A	Infinite	Infinite	N/A
35	Public Interruptible		Infinite	Infinite	N/A	N/A	Infinite	N/A	N/A	Infinite	Infinite	N/A
36	Commodity Rates (per 1,000 gallons over minimum and per Tier)											
37	All (except construction, prison)	Tier 1	$ 1.78	$ 1.82	0.04	2.25%	$ 1.20	$ (0.58)	-32.58%	$ 1.64	$ (0.14)	-7.87%
38	All (except construction, prison)	Tier 2	$ 2.24	$ 2.29	0.05	2.23%	1.80	$ (0.44)	-19.64%	1.86	(0.38)	-16.96%
39	All (except construction, prison)	Tier 3	$ 2.24	$ 2.29	0.05	2.23%	2.15	$ (0.09)	-4.02%	1.86	(0.38)	-16.96%
40	Construction, Contract Rate		$ 1.00	$ 1.00	-	0.00%	1.00	$ -	0.00%	0.90	(0.10)	-10.00%
41	Prison		$ 2.02	$ 2.06	0.04	1.98%	1.72	$ (0.30)	-14.85%	1.92	(0.10)	-4.95%
42	Public Interruptible, Contract Rate		$ 1.00	$ 1.00	-	0.00%	1.00	$ -	0.00%	0.90	(0.10)	-10.00%

Arizona American / Anthem Water Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
Page 3
Witness: Kozoman

Line No.	Monthly Minimums	Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent Increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	5/8 x 3/4 Inch (a)	$ 16.00	$ 16.15	$ 0.15	0.94%	$ 11.45	$ (4.55)	-28.44%	$ 12.00	$ (4.00)	-25.00%
2	3/4 Inch (a)	16.00	16.15	0.15	0.94%	11.45	(4.55)	-28.44%	12.00	(4.00)	-25.00%
3	1 Inch (a)	32.00	32.30	0.30	0.94%	22.91	(9.09)	-28.41%	24.00	(8.00)	-25.00%
4	1 1/2 Inch (a)	64.00	64.60	0.60	0.94%	45.81	(18.19)	-28.42%	48.00	(16.00)	-25.00%
5	2 Inch	80.00	80.75	0.75	0.94%	57.27	(22.73)	-28.41%	60.00	(20.00)	-25.00%
6	3 Inch	160.00	161.75	1.75	1.09%	114.54	(45.46)	-28.41%	120.00	(40.00)	-25.00%
7	4 Inch	200.00	202.35	2.35	1.18%	143.17	(56.83)	-28.42%	150.00	(50.00)	-25.00%
8	6 Inch	250.00	252.94	2.94	1.18%	178.96	(71.04)	-28.42%	187.50	(62.50)	-25.00%
9	8 Inch	-	1,295.20		N/A	1070.91			1,000.00	1,000.00	
10	Private Fire Protection (Flat Rates)										
11	3 Inch	70.00	70.82	0.82	1.17%	50.11	(19.89)	-28.41%	60.00	(10.00)	-14.29%
12	4 Inch	90.00	91.06	1.06	1.18%	64.43	(25.57)	-28.41%	72.00	(18.00)	-20.00%
13	6 Inch (a)	135.00	136.59	1.59	1.18%	96.64	(38.36)	-28.41%	104.00	(31.00)	-22.96%
14	8 Inch	180.00	182.11	2.11	1.17%	128.85	(51.15)	-28.42%	154.00	(26.00)	-14.44%
15	10 Inch	360.00	364.23	4.23	1.18%	257.71	(102.29)	-28.41%	308.00	(52.00)	-14.44%
16	Gallons In Minimum										
17	All	-	-			-			-		
18	Tier 1: Gallons / upper limit										
19	All (except wholesale	Infinite	Infinite			4,000			Infinite		
20	Irrigation	Infinite	Infinite			Infinite			Infinite		
21	Wholesale	Infinite	Infinite			Infinite			Infinite		
22	Tier 2: (Gallon upper limit, up to, but not exceeding)										
23	All (except wholesale	Infinite	Infinite			100,000			Infinite		
24	Irrigation	Infinite	Infinite			Infinite			Infinite		
25	Wholesale	Infinite	Infinite			Infinite			Infinite		
26	Tier 3: (Gallon over)										
27	All (except wholesale	Infinite	Infinite			Infinite			Infinite		
28	Irrigation	Infinite	Infinite			Infinite			Infinite		
29	Wholesale	Infinite	Infinite			Infinite			Infinite		
30	Commodity Rates (per 1,000 gallons over minimum and per Tier)										
31	All, except wholesale, Irrigation	$ 2.00	$ 2.02	0.02	1.17%	$ 0.88	$ (1.12)	-56.00%	$ 1.63	(0.37)	-18.50%
32	All, except wholesale, Irrigation	2.00	2.02	0.02	1.17%	$ 1.32	(0.68)	-34.00%	1.63	(0.37)	-18.50%
33	All, except wholesale, Irrigation	2.00	2.02	0.02	1.17%	$ 1.57	(0.43)	-21.50%	1.63	(0.37)	-18.50%
34	Irrigation	0.62	0.62			$ 0.62	-	0.00%			
35	Wholesale	2.16	2.16	-	0.00%	$ 2.16	-	0.00%	1.80	(0.36)	-16.67%

Arizona American / Anthem / Agua Wastewater Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
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Witness: Kozoman

Line No.	Monthly Minimums	Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent Increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	Residential	$ 16.00	$ 22.07	$ 6.07	37.94%	$ 14.68	$ (1.32)	-8.25%	$ 18.85	$ 2.85	17.81%
2	Small Commercial 5/8 Inch Meter	16.00	22.07	6.07	37.94%	14.68	(1.32)	-8.25%	18.85	2.85	17.81%
3	Small Commercial 3/4 Inch Meter	24.00	33.10	9.10	37.92%	22.03	(1.97)	-8.21%	28.28	4.28	17.83%
4	Small Commercial 1 Inch Meter	32.00	44.15	12.15	37.97%	29.37	(2.63)	-8.22%	37.70	5.70	17.81%
5	Large Commercial	64.00	88.25	24.25	37.89%	58.73	(5.27)	-8.23%	78.00	14.00	21.88%
6											
7	Usage (per 1,000 gallons, up to)										
8	Residential	7,000	7,000			7,000			7,000		
9	Small Commercial 5/8 Inch Meter	10,000	10,000			10,000			10,000		
10	Small Commercial 3/4 Inch Meter	15,000	15,000			15,000			15,000		
11	Small Commercial 1 Inch Meter	25,000	25,000			25,000			25,000		
12	*	Infinite	Infinite			Infinite			Infinite		
13	Treatco	Infinite	Infinite			Infinite			Infinite		
14	Usage Rates (per 1,000 gallons up to limit)										
15	Residential	$ 2.00	$ 2.76	$ 0.76	38.00%	$ 1.84	$ (0.16)	-8.00%	2.43	$ 0.43	21.50%
16	Small Commercial 5/8 Inch Meter	$ 2.00	2.76	0.76	38.00%	1.84	(0.16)	-8.00%	2.43	0.43	21.50%
17	Small Commercial 3/4 Inch Meter	$ 2.00	2.76	0.76	38.00%	1.84	(0.16)	-8.00%	2.43	0.43	21.50%
18	Small Commercial 1 Inch Meter	$ 2.00	2.76	0.76	38.00%	1.84	(0.16)	-8.00%	2.43	0.43	21.50%
19	Large Commercial	$ 2.00	2.76	0.76	38.00%	1.84	(0.16)	-8.00%	2.43	0.43	21.50%
20	Treatco	$ 2.32	2.32	-	0.00%	2.32	-	0.00%	2.77	0.45	19.40%
21	**Capacity Reservation Charge**	$ 765.00	765.00	-	0.00%	$ 765.00	-	0.00%	$ 765.00	-	0.00%
22											
23	**Annual Fee for Industrial Discharge Service**										
24	For those customers consuming an amount of water less than or equal										
25	50,000 gallons per month through one or more water meters to the										
26	same facility, inclusive of meters used for irrigation:	$ 500.00	500.00	-	0.00%	$ 500.00	-	0.00%	$ 500.00	-	0.00%
27											
28											
29	For those customers consuming an amount of water greater than										
30	50,000 gallons per month through one or more water meters to the										
31	same facility, inclusive of meters used for irrigation:	$ 1,000.00	1,000.00	-	0.00%	$ 1,000.00	-	0.00%	$ 1,000.00	-	0.00%

Arizona American / Havasu Water Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
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Witness: Kozoman

Line No.	Monthly Minimums	Units Served	Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	5/8 x 3/4 Inch		$ 10.00	$ 12.99	$ 2.99	29.90%	$ 9.24	$ (0.76)	-7.60%	$ 10.75	$ 0.75	7.50%
2	1 Inch		17.10	22.23	5.13	30.00%	15.80	(1.30)	-7.60%	18.00	0.90	5.26%
3	1 1/2 Inch		24.00	31.20	7.20	30.00%				25.00	1.00	4.17%
4	2 Inch		33.60	43.68	10.08	30.00%	31.04	(2.56)	-7.62%	32.00	(1.60)	-4.76%
5	3 Inch		45.60	59.28	13.68	30.00%	42.13	(3.47)	-7.61%	44.00	(1.60)	-3.51%
6	4 Inch		57.60	74.88	17.28	30.00%	53.21	(4.39)	-7.62%	61.00	3.40	5.90%
7	6 Inch		200.00	260.00	60.00	30.00%				215.00	15.00	7.50%
8	8 Inch		400.00	520.00	120.00	30.00%				430.00	30.00	7.50%
9	Multi-Family 1"Meter	44	440.00	571.56	131.56	29.90%	406.49	(33.51)	-7.62%	473.00	33.00	7.50%
10	Multi-Family 2" Meter	56	560.00	727.44	167.44	29.90%	517.35	(42.65)	-7.62%	602.00	42.00	7.50%
11	Multi-Family 4" Meter	64	640.00	831.36	191.36	29.90%	591.26	(48.74)	-7.62%	688.00	48.00	7.50%
12	Multi-Family 2" Meter	65	650.00	844.35	194.35	29.90%	600.50	(49.50)	-7.62%	698.75	48.75	7.50%
13	Multi-Family 4" Meter	67	670.00	870.33	200.33	29.90%	618.98	(51.02)	-7.61%	720.25	50.25	7.50%
14	Multi-Family 1"Meter	89	890.00	1,156.11	266.11	29.90%	822.22	(67.78)	-7.62%	956.75	66.75	7.50%
15	Multi-Family 2" Meter	102	1,020.00	1,324.98	304.98	29.90%	942.32	(77.68)	-7.62%	1,096.50	76.50	7.50%
16	Multi-Family 4" Meter	129	1,290.00	1,675.71	385.71	29.90%	1,191.76	(98.24)	-7.62%	1,386.75	96.75	7.50%
17	Multi-Family 4" Meter	153	1,530.00	1,987.47	457.47	29.90%	1,413.48	(116.52)	-7.62%	1,644.75	114.75	7.50%
18	Gallons In Minimum, All Except		1,000	1,000	-	0.00%	-	(1,000)	-100.00%	-	(1,000)	-100.00%
19	Multi-Family											
20	Multi-Family 1"Meter	44	44,000	44,000			-	(44,000)	-100.00%	-	(44,000)	-100.00%
21	Multi-Family 2" Meter	56	56,000	56,000			-	(56,000)	-100.00%	-	(56,000)	-100.00%
22	Multi-Family 4" Meter	64	64,000	64,000			-	(64,000)	-100.00%	-	(64,000)	-100.00%
23	Multi-Family 2" Meter	65	65,000	65,000			-	(65,000)	-100.00%	-	(65,000)	-100.00%
24	Multi-Family 4" Meter	67	67,000	67,000			-	(67,000)	-100.00%	-	(67,000)	-100.00%
25	Multi-Family 1"Meter	89	89,000	89,000			-	(89,000)	-100.00%	-	(89,000)	-100.00%
26	Multi-Family 2" Meter	102	102,000	102,000			-	(102,000)	-100.00%	-	(102,000)	-100.00%
27	Multi-Family 4" Meter	129	129,000	129,000			-	(129,000)	-100.00%	-	(129,000)	-100.00%
28	Multi-Family 4" Meter	153	153,000	153,000			-	(153,000)	-100.00%	-	(153,000)	-100.00%
29	Gallons in Tiers											
30	Tier 1: Gallons upper limit		Infinite	Infinite			4,000			Infinite		
31	Tier 2: Gallons upper limit		Infinite	Infinite			100,000			Infinite		
32	Tier 3: Gallons upper limit		Infinite	Infinite			Infinite			Infinite		
33	Commodity Rates (per 1,000 gallons over minimum and per Tier)											
34	All, summer rate	Tier 1	$ 1.42	$ 2.07	0.65	45.77%	0.81	(0.61)	-42.96%	1.72	0.30	**21.13%**
35	All, summer rate	Tier 2	1.42	2.07	0.65	45.77%	1.21	(0.21)	-14.79%	1.72	0.30	**21.13%**
36	All, summer rate	Tier 3	1.42	2.07	0.65	45.77%	1.45	0.03	2.11%	1.72	0.30	**21.13%**
37	All, winter rate	Tier 1	$ 1.31	$ 1.91	0.60	45.80%	0.81	(0.50)	-38.17%	1.72	0.41	**31.30%**
38	All, winter rate	Tier 2	1.31	1.91	0.60	45.80%	1.21	(0.10)	-7.63%	1.72	0.41	**31.30%**
39	All, winter rate	Tier 3	1.31	1.91	0.60	45.80%	1.45	0.14	10.69%	1.72	0.41	**31.30%**

Arizona American / Mohave Water Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
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Witness: Kozoman

Line No.	Monthly Minimums	Units Served	Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent Increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	Residential,Commercial, Irrigation, Resale and Miscellaneous Customers											
2	5/8 x 3/4 Inch		$ 8.65	$ 9.03	$ 0.38	4.39%	$ 7.27	$ (1.38)	-15.93%	$ 7.45	$ (1.20)	-13.87%
3	3/4 Inch						7.27					
4	1 Inch		$ 15.00	$ 15.68	0.68	4.53%	12.61	(2.39)		12.90	(2.10)	-14.00%
5	1 1/2 Inch		$ 25.00	$ 26.15	1.15	4.60%	21.01	(3.99)	-15.98%	21.50	(3.50)	-14.00%
6	2 Inch		$ 30.00	$ 31.38	1.38	4.60%	25.21	(4.79)	-15.97%	25.85	(4.15)	-13.83%
7	3 Inch		$ 60.00	$ 62.77	2.77	4.62%	50.41	(9.59)	-15.98%	51.65	(8.35)	-13.92%
8	4 Inch		$ 90.00	$ 94.17	4.17	4.63%	75.62	(14.38)	-15.98%	77.50	(12.50)	-13.89%
9	6 Inch		$ 200.00	$ 209.27	9.27	4.64%	168.05	(31.95)	-15.98%	172.25	(27.75)	-13.88%
10	8 Inch		$ 400.00	$ 418.56	18.56	4.64%	336.10	(63.90)	-15.98%	344.50	(55.50)	-13.88%
11	10 Inch		N/A	$ 723.20			581.23			596.00		
12	Residential Rio Water										-	
13	5/8 Inch (a)		7.75	8.10	0.35	4.52%	6.51	(1.24)	-16.00%	6.65	(1.10)	-14.19%
14	1 Inch (a)		7.75	8.10	0.35	4.52%	6.51	(1.24)	-16.00%	6.65	(1.10)	-14.19%
15	2 Inch (a)		7.75	8.10	0.35	4.52%	6.51	(1.24)	-16.00%	6.65	(1.10)	-14.19%
16	Private Fire										-	
17	2 Inch or smaller (a)		3.00	3.13	0.13	4.33%	2.52	(0.48)	-16.00%	2.60	(0.40)	-13.33%
18	4 Inch (a)		6.00	6.27	0.27	4.50%	5.04	(0.96)	-16.00%	5.15	(0.85)	-14.17%
19	6 Inch (a)		9.00	9.42	0.42	4.67%	7.56	(1.44)	-16.00%	7.75	(1.25)	-13.89%
20	8 Inch (a)		12.00	12.55	0.55	4.58%	10.08	(1.92)	-16.00%	10.35	(1.65)	-13.75%
21	10 Inch		15.00	15.69	0.69	4.60%	12.60	(2.40)	-16.00%	12.90	(2.10)	-14.00%
22	12 Inch (a)		18.00	18.83	0.83	4.61%	15.12	(2.88)	-15.98%	15.50	(2.50)	-13.89%
23	14 Inch (a)		21.00	21.96	0.96	4.57%	17.65	(3.35)	-15.98%	18.10	(2.90)	-13.81%
24	20 Inch		30.00	31.38	1.38	4.60%	25.21	(4.79)	-15.98%	25.85	(4.15)	-13.83%
25	Per Sprinkler Head (a)		0.51	0.53	0.02	3.92%				0.44	(0.07)	-13.73%
26	Per each Private Fire Hydrant (a)		7.64	7.99	0.35	4.58%	6.42	(1.22)	-15.97%	6.55	(1.09)	-14.27%
27	Gallons In Minimum											
28	All (except Rio Water & Multi-Units		1000	1000	-	0.00%	0	(1,000)	-100.00%	0	(1,000)	-100.00%
29	Rio Water		2000	2000	-	0.00%	0	(2,000)	-100.00%	0	(2,000)	-100.00%
30	Multi-Unit & Multi-Family (a)											
31	Residential MF 5/8" Meter	573	4,956.45	5,174.19	217.74	4.39%	4,165.71	(790.74)	-15.95%	4,268.85	(687.60)	-13.87%
32	Residential MF 1" Meter	262	2,266.30	2,365.86	99.56	4.39%	1,904.74	(361.56)	-15.95%	1,951.90	(314.40)	-13.87%
33	Residential MF 1.5" Meter	130	1,124.50	1,173.90	49.40	4.39%	945.10	(179.40)	-15.95%	968.50	(156.00)	-13.87%
34	Residential MF 2" Meter	1525	13,191.25	13,770.75	579.50	4.39%	11,086.76	(2,104.49)	-15.95%	11,361.25	(1,830.00)	-13.87%
35	Residential MF 4" Meter	107	925.55	966.21	40.66	4.39%	777.89	(147.66)	-15.95%	797.15	(128.40)	-13.87%
36	Residential MF 6" Meter	1054	9,117.10	9,517.62	400.52	4.39%	7,662.58	(1,454.52)	-15.95%	7,852.30	(1,264.80)	-13.87%
37	Commercial 5/8"Meter	94	813.10	848.82	35.72	4.39%	683.38	(129.72)	-15.95%	700.30	(112.80)	-13.87%
38	Commmerical 1 "Meter	22	190.30	198.66	8.36	4.39%	159.94	(30.36)	-15.95%	163.90	(26.40)	-13.87%
39	Commercial 1.5" Meter	5	43.25	45.15	1.90	4.39%	36.35	(6.90)	-15.95%	37.25	(6.00)	-13.87%
40	Commercial 2" Meter	18	155.70	162.54	6.84	4.39%	130.86	(24.84)	-15.95%	134.10	(21.60)	-13.87%
41	Commodity Rates (per 1,000 gallons over minimum and per Tier, All Except Rio Water)											
42	Tier 1		$ 1.48	$ 1.55	0.07	4.73%	0.81	$ (0.67)	-45.27%	1.24	$ (0.24)	-16.22%
43	Tier 2		1.48	1.55	0.07	4.73%	1.23	(0.25)	-16.89%	1.24	(0.24)	-16.22%
44	Tier 3		1.48	1.55	0.07	4.73%	1.47	(0.01)	-0.68%	1.24	(0.24)	-16.22%
45	Commodity Rates: Rio Water											
46	Tier 1		$ 1.75	$ 1.83	0.08	4.57%	0.81	(0.94)	-53.71%	1.43	(0.32)	-18.29%
47	Tier 2		1.75	1.83	0.08	4.57%	1.23	(0.52)	-29.71%	1.43	(0.32)	-18.29%
48	Tier 3		1.75	1.83	0.08	4.57%	1.47	(0.28)	-16.00%	1.43	(0.32)	-18.29%
49	Gallons in Tiers											
50	Tier 1: Gallons upper limit		Infinite				4,000			Infinite		
51	Tier 2: Gallons upper limit		Infinite				100,000			Infinite		
52	Tier 3: Gallons upper limit		Infinite				Infinite			Infinite		
53	ACC Staff Public Authority Private Fire: Infinite Quantity						$ 1.25					
54	(a) Monthly Minimum times Units											

Arizona American / Sun City Water Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
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Witness: Kozoman

Line No.	Monthly Minimums	Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent Increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	5/8 x 3/4 Inch	$ 5.00	$ 8.58	$ 3.58	71.60%	$ 6.59	$ 1.59	31.89%	$ 5.00	$ -	0.00%
2	3/4 Inch	5.00	8.58	3.58	71.60%	6.59	1.59	31.89%	5.00	-	0.00%
3	1 Inch	13.00	22.36	9.36	72.00%	17.15	4.15	31.89%	13.00	-	0.00%
4	1 1/2 Inch	28.00	48.16	20.16	72.00%	36.93	8.93	31.89%	27.84	(0.16)	-0.57%
5	2 Inch	41.00	70.52	29.52	72.00%	54.07	13.07	31.89%	40.98	(0.02)	-0.05%
6	3 Inch	70.00	120.40	50.40	72.00%	92.32	22.32	31.89%	69.96	(0.04)	-0.06%
7	4 Inch	103.00	177.16	74.16	72.00%	135.85	32.85	31.89%	102.95	(0.05)	-0.05%
8	6 Inch	141.00	242.52	101.52	72.00%	185.97	44.97	31.89%	140.93	(0.07)	-0.05%
9	Private Fire Protection										
10	Flat Rate 3	6.00	10.32	4.32	72.00%	7.91	1.91	31.89%	6.00	-	0.00%
11	Flat Rate 4	9.00	15.48	6.48	72.00%	11.87	2.87	31.89%	9.00	-	0.00%
12	Flat Rate 6	12.50	21.50	9.00	72.00%	16.49	3.99	31.89%	12.50	-	0.00%
13	Flat Rate 8	20.00	34.40	14.40	72.00%	26.38	6.38	31.89%	20.00	-	0.00%
14	Flat Rate 10	30.00	51.60	21.60	72.00%	39.57	9.57	31.89%	30.00	-	0.00%
15	Standby									-	
16	Public Interruptible	3.50	6.02	2.52	72.00%	4.62	1.12	31.89%	3.50	-	0.00%
17	Irrigation										
18	1 Inch	13.00	22.36	9.36	72.00%	17.15	4.15	31.89%	13.00	-	0.00%
19	1 1/2 Inch	28.00	48.16	20.16	72.00%	36.93	8.93	31.89%	27.99	(0.01)	-0.04%
20	2 Inch	41.00	70.52	29.52	72.00%	54.07	13.07	31.89%	40.99	(0.01)	-0.02%
21	3 Inch	70.00	120.40	50.40	72.00%	92.32	22.32	31.89%	69.99	(0.01)	-0.01%
22	4 Inch	103.00	177.16	74.16	72.00%	135.85	32.85	31.89%	102.98	(0.02)	-0.02%
23	6 Inch	141.00	242.52	101.52	72.00%	185.97	44.97	31.89%	140.81	(0.19)	-0.13%
24	Gallons In Minimum										
25	All customer classes	-	-								
26	Gallons in Tiers										
27	All, except construction, irrigation, public interruptible										
28	Tier 1: Gallons upper limit	8,000	8,000	-	0.00%	4,000			8,000	-	0.00%
29	Tier 2: Gallons upper limit	Infinite	Infinite			100,000			Infinite		
30	Tier 3: Gallons upper limit	Infinite	Infinite			Infinite			Infinite		
31	Commodity Rates										
32	All, except construction, irrigation, public interruptible										
33	Tier 1	$ 0.73	$ 1.26	0.53	72.60%	$ 0.78	$ 0.05	6.85%	$ 0.99	**$ 0.26**	**35.62%**
34	Tier 2	0.92	1.58	0.66	71.74%	1.17	0.25	27.17%	1.29	**0.37**	**40.22%**
35	Tier 3	0.92	1.58	0.66	71.74%	1.39	0.47	51.09%	1.29	**0.37**	**40.22%**
36	Construction / Untreated CAP	0.50	0.86	0.36	72.00%	0.66	0.16	31.89%	1.49	**0.99**	**198.00%**
37	Irrigation	0.65	1.12	0.47	72.31%	0.86	0.21	31.89%	1.96	**1.31**	**201.54%**
38	Public Interruptible	0.50	0.86	0.36	72.00%	0.66	0.16	31.89%	1.49	**0.99**	**198.00%**
39	Private Fire Protection					0.78					

Arizona American / Sun City Wastewater Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
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Line No.	Monthly Minimums	Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent Increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	Residential and Commercial										
2	Residential (SSR) (a)	$ 12.87	$ 13.67	$ 0.80	6.22%	$ 10.82	$ (2.05)	-15.93%	$ 10.58	$ (2.29)	-17.79%
3	Commercial (SSC) (a)	15.46	16.42	0.96	6.21%	12.99	(2.47)	-15.98%	12.71	(2.75)	-17.79%
4	Commercial Large User (SS6 based on consumption)	32.80	34.84	2.04	6.22%	27.56	(5.24)	-15.98%	26.97	(5.83)	-17.77%
5	SS1 (commercial, additonal toilets) (a)	3.78	4.02	0.24	6.35%	3.18	(0.60)	-15.87%	3.11	(0.67)	-17.72%
6	SS2 (commercial restaurant,										
7	per dishwasher or garbage grinder)	29.10	30.91	1.81	6.22%	24.45	(4.65)	-15.98%	23.93	(5.17)	-17.77%
8	~~SS3 (commercial laundromat, per washing machine)~~	~~7.06~~	~~7.49~~	~~0.43~~	~~6.09%~~	~~5.93~~	~~(1.13)~~	~~-16.01%~~	~~5.80~~	~~(1.26)~~	~~-17.85%~~
9	SS4 (commercial, per wash rack)	14.40	15.30	0.90	6.25%	12.10	(2.30)	-15.97%	11.84	(2.56)	-17.78%
10	Rental Rooms	7.99	8.49	0.50	6.26%			0.00%	6.57	(1.42)	-17.77%
11	Paradise Resort Park, Contract Rate	3.94	3.94	-	0.00%			0.00%	2.88	(1.06)	-26.90%
12											
13	Gallons In Minimum										
14	Commercial SSR6 & Paradise Park Resort	20,000	20,000	-	0.00%	20,000	-	0.00%	20,000	-	0.00%
15											
16	Commodity Rates (per 1,000 gallons over minimum)										
17	Commercial SSR6 & Paradise Park Resort (a)	$ 1.24	$ 1.32	0.08	6.45%	$ 1.04	(0.20)	-16.13%	$ 1.20	(0.04)	-3.23%
18											
19	**Annual Fee for Industrial Discharge Service**										
20	For those customers consuming an amount of water less than or equal										
21	50,000 gallons per month through one or more water meters to the										
22	same facility, inclusive of meters used for irrigation:	$ 500.00	$ 500.00	-	0.00%	$ 500.00	-	0.00%	$ 500.00	-	0.00%
23											
24											
25	For those customers consuming an amount of water greater than										
26	50,000 gallons per month through one or more water meters to the										
27	same facility, inclusive of meters used for irrigation:	$ 1,000.00	$ 1,000.00	-	0.00%	$ 1,000.00	-	0.00%	$ 1,000.00	-	0.00%
28											
29	Annual Fee for Industrial Discharge Service charges shall be non-refundable and shall be assessed										
30	in advance each January by the Company by special billing. For new customers receiving this service,										
31	a prorated charge shall be assessed.										

Arizona American / Sun City West Water Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
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Line No.	Monthly Minimums	Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent Increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	5/8 x 3/4 Inch	$ 5.00	$ 6.82	$ 1.82	36.40%	$ 5.60	$ 0.60	12.00%	$ 5.00	$ -	0.00%
2	3/4 Inch	5.00	6.82	1.82	36.40%	5.60	0.60	12.00%	5.00	-	0.00%
3	1 Inch (a)	13.00	17.75	4.75	36.54%	14.55	1.55	11.92%	13.00	-	0.00%
4	1 1/2 Inch (a)	28.00	38.24	10.24	36.57%	31.33	3.33	11.89%	28.00	-	0.00%
5	2 Inch (a)	41.00	56.00	15.00	36.59%	45.86	4.86	11.85%	41.00	-	0.00%
6	3 Inch	70.00	95.60	25.60	36.57%	78.32	8.32	11.89%	70.00	-	0.00%
7	4 Inch (a)	103.00	140.67	37.67	36.57%	115.24	12.24	11.88%	103.00	-	0.00%
8	6 Inch (a)	141.00	192.57	51.57	36.57%	157.75	16.75	11.88%	141.00	-	0.00%
9	Construction / Tariff to be canceled, as it is									-	
10	no longer used	8.00									
11	General Fire Sprinkler Rate 4 "	30.00	40.97	10.97	36.57%	33.57	3.57	11.90%	30.00	-	0.00%
12	General Fire Sprinkler Rate 6 "	45.00	61.46	16.46	36.58%	50.35	5.35	11.89%	45.00	-	0.00%
13	General Fire Sprinkler Rate 8 "	60.00	81.94	21.94	36.57%	67.13	7.13	11.88%	60.00	-	0.00%
14	General Fire Sprinkler Rate 10 "	120.00	163.89	43.89	36.58%				120.00	-	0.00%
15											
16	Gallons included in Monthly Minimum	0	0	-							
17	Gallons included in Tiers										
18	All, except construction										
19	Tier 1: Gallons upper limit	8,000	8,000	-	0.00%	4,000	(4,000)	-50.00%	8,000	-	0.00%
20	Tier 2: Gallons upper limit	Infinite	Infinite			100,000			Infinite		
21	Tier 3: Gallons upper limit	Infinite	Infinite			Infinite			Infinite		
22	Construction	Infinite	Infinite						Infinite		
23	All except general fire sprinkler										
24	Tier 1	$ 0.93	$ 1.27	0.34	36.56%	$ 0.84	$ (0.09)	-9.68%	$ 1.14	**0.21**	**22.58%**
25	Tier 2	$ 1.12	$ 1.53	0.41	36.61%	1.24	0.12	10.71%	1.38	**0.26**	**23.21%**
26	Tier 3	$ 1.12	$ 1.53	0.41	36.61%	1.52	0.40	35.71%			
27	General fire sprinkler					0.60					
28	Effluent Sales, per Acre Foot	150.00	204.86	54.86	36.57%	167.82	17.82	11.88%	216.90	**66.90**	**44.60%**
29	Central Arizona Project - Raw Untreated Water - Per 1,000 Gallons										
30		0.50	0.68	0.18	36.00%	0.56	0.06	12.00%	0.72	**0.22**	**44.00%**
31	In Addition to above charges, Company shall collect Groundwater Savings Fee per Decisin 62293										

Arizona American / Sun City West Wastewater Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
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Line No.	Monthly Minimums	Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent Increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	Residential and Commercial										
2	Residential (WSR)	$ 16.24	$ 23.64	$ 7.40	45.57%	$ 21.45	$ 5.21	32.08%	$ 20.90	$ 4.66	28.69%
3	Commercial (SSC)	$ 23.09	$ 33.62	10.53	45.60%	30.50	7.41	32.09%	29.72	6.63	28.71%
4	Commercial Large User (SS6 based										
5	on consumption)	$ 45.42	$ 66.14	20.72	45.62%	59.99	14.57	32.08%	58.46	13.04	28.71%
6	WS1 (commercial, additonal toilets)	$ 5.30	$ 7.72	2.42	45.66%	7.00	1.70	32.08%	6.82	1.52	28.68%
7	WS2 (commercial restaurant, per dishwasher or										
8	or garbage grinder)	$ 42.58	$ 62.00	19.42	45.61%	56.24	13.66	32.08%	54.81	12.23	28.72%
9	WS3 (commercial laundromat, per washing machine)	$ 9.93	$ 14.46	4.53	45.62%	13.11	3.18	32.02%	12.78	2.85	28.70%
10	WS4 (commercial, per wash rack)	$ 20.81	$ 30.30	9.49	45.60%	27.48	6.67	32.05%	26.79	5.98	28.74%
11											
12	**Annual Fee for Industrial Discharge Service**										
13	For those customers consuming an amount of water less than or equal										
14	50,000 gallons per month through one or more water meters to the										
15	same facility, inclusive of meters used for irrigation:	$ 500.00	$ 500.00	-	0.00%	$ 500.00	-	0.00%	$ 500.00	-	0.00%
16											
17	For those customers consuming an amount of water greater than										
18	50,000 gallons per month through one or more water meters to the										
19	same facility, inclusive of meters used for irrigation:	$ 1,000.00	$ 1,000.00	-	0.00%	$ 1,000.00	-	0.00%	$ 1,000.00	-	0.00%
20											
21	Annual Fee for Industrial Discharge Service charges shall be non-refundable and shall be assessed										
22	in advance each January by the Company by special billing. For new customers receiving this service,										
23	a prorated charge shall be assessed.										
24											
25	Gallons In Minimum										
26	Commercial SSR6	20,000	20,000	-	0.00%	20,000	-	0.00%	20,000	-	0.00%
27											
28	Commodity Rates (per 1,000 gallons over minimum)										
29	Commercial SSR6 (a)	$ 0.98	$ 1.43	0.45	45.92%	$ 1.29	0.31	31.63%	$ 2.50	$ 1.52	155.10%

Arizona American / Tubac Water Division
Test Year Ended December 31, 2001
Comparison of Present, Company Proposed Rebuttal Rates
ACC Staff Proposed Rates, RUCO Staff Proposed Rates

Exhibit
Kozoman Rebuttal Schedule 1
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Witness: Kozoman

Line No.	Monthly Minimums	Present Rates	Company Proposed Rebuttal Rates	Company Dollar Increase (Decrease) Over Present Rates	Company Percent Increase (Decrease) Over Present Rates	ACC Staff Proposed Rates	ACC Staff Dollar Increase (Decrease) Over Present Rates	ACC Staff Percent Increase (Decrease) Over Present Rates	RUCO Staff Proposed Rates	RUCO Staff Dollar Increase (Decrease) Over Present Rates	RUCO Staff Percent Increase (Decrease) Over Present Rates
1	5/8 x 3/4 Inch	$ 15.35	$ 26.74	$ 11.39	74.20%	$ 20.80	$ 5.45	35.50%	$ 15.00	$ (0.35)	-2.28%
2	3/4 Inch	15.35	26.74	11.39	74.20%	20.80	5.45	35.50%	15.00	(0.35)	-2.28%
3	1 Inch	23.00	40.07	17.07	74.22%	31.17	8.17	35.52%	22.48	(0.52)	-2.26%
4	1 1/2 Inch	46.00	80.14	34.14	74.22%	62.23	16.23	35.28%	44.96	(1.04)	-2.26%
5	2 Inch	76.00	132.41	56.41	74.22%	102.98	26.98	35.50%	74.28	(1.72)	-2.26%
6	3 Inch	90.00	156.81	66.81	74.23%	121.95	31.95	35.50%	87.96	(2.04)	-2.27%
7	4 Inch	132.00	229.98	97.98	74.23%	178.85	46.85	35.49%	129.00	(3.00)	-2.27%
8	6 Inch	180.00	313.61	133.61	74.23%	243.89	63.89	35.49%	175.91	(4.09)	-2.27%
9	8 Inch	N/A	2,674.00			2,079.62			1,500.00		
10	Gallons In Minimum										
11	All										
12	Tier 1: Gallons upper limit	8000	8,000	-	0.00%	4,000	(4,000)	-50.00%	8,000	-	0.00%
13	Tier 2: Gallons upper limit	Infinite	Infinite			10,000					
14	Tier 3: Gallons upper limit	Infinite	Infinite			Infinite					
15	Commodity Rates (per 1,000 gallons over minimum and/or per Tier)										
16	Tier 1	$ 1.66	$ 2.89	1.23	74.10%	1.81	0.15	9.04%	2.13	0.47	**28.31%**
17	Tier 2	$ 2.04	$ 3.55	1.51	74.02%	2.72	0.68	33.33%	2.61	0.57	**27.94%**
18	Tier 3	$ 2.04	$ 3.55	1.51	74.02%	3.26	1.22	59.80%			

Arizona American
Test Year Ended December 31, 2001
Summary of ACC Staff's Rates of Return at Present and Proposed Rates of Return by Meter Size / All Water Districts
Negative Number on Percent Change Line indicates Rate of Return has decreased, Positive Number indicates Increase in Return

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Kozoman Rebuttal Schedule 2
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Line No.		Total	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
1	**Agua Fria Water / ACC Staff's Rates of Return by Meter Sizes**							**ACC Staff Recommends a Rate Decrease**				
2	Present Rates (a)	9.76%	9.03%	12.03%	17.68%	55.13%	48.11%	39.22%	70.20%	12.67%	-5.11%	No Meter
3	Proposed Rates (b)	6.57%	3.64%	5.06%	7.92%	27.63%	25.28%	21.35%	33.89%	7.95%	-2.22%	This Size
4	Percent Change	-32.66%	-59.73%	-57.95%	-55.20%	-49.87%	-47.45%	-45.58%	-51.72%	-37.24%	-56.56%	
5												
6	**Anthem Water / ACC Staff's Rates of Return by Meter Size**							**ACC Staff Recommends a Rate Decrease**				
7	Present Rates (a)	8.18%	16.50%	7.16%	9.15%	38.58%	21.46%	32.29%	-3.64%	-4.84%	No Meter	No Meter
8	Proposed Rates (b)	6.59%	8.08%	1.34%	4.36%	41.48%	32.20%	61.09%	78.04%	4.76%	This Size	This Size
9	Percent Change	-19.44%	**-51.05%**	**-81.23%**	-52.32%	**7.52%**	**50.03%**	**89.17%**	(c)	(c)		
10												
11	**Havasu Water / ACC Staff's Rates of Return by Meter Size**							**ACC Staff Recommends a Rate Decrease**				
12	Present Rates (a)	8.91%	1.67%	No Meter	79.23%	No Meter	70.19%	33.91%	52.83%	No Meter	No Meter	No Meter
13	Proposed Rates (b)	7.38%	-1.10%	This Size	130.42%	This Size	76.55%	38.80%	51.81%	This Size	This Size	This Size
14	Percent Change	-17.19%	-166.09%		**64.60%**		**9.06%**	**14.42%**	-1.92%			
15												
16	**Mohave Water / ACC Staff's Rates of Return by Meter Size**							**ACC Staff Recommends a Rate Decrease**				
17	Present Rates (a)	10.93%	9.42%	No Meter	24.99%	44.32%	20.91%	25.01%	-4.07%	22.81%	-6.50%	-5.96%
18	Proposed Rates (b)	6.64%	4.42%	This Size	19.38%	38.75%	17.61%	21.60%	-4.61%	21.12%	-6.61%	-6.05%
19	Percent Change	-39.28%	-53.05%		-22.44%	-12.59%	-15.77%	-13.66%	13.29%	-7.38%	-1.61%	-1.50%
20												
21	**Sun City Water / ACC Staff's Rates of Return by Meter Size**							**ACC Staff Recommends a Rate Increase**				
22	Present Rates (a)	0.99%	-3.92%	-2.95%	5.95%	11.21%	8.43%	9.97%	-2.65%	3.42%	-6.75%	No Meter
23	Proposed Rates (b)	6.60%	**0.23%**	1.12%	**12.82%**	**19.95%**	**16.21%**	**19.57%**	0.77%	**10.73%**	-6.50%	This Size
24	Percent Change	566.32%	(c)	(c)	115.45%	78.08%	92.30%	96.34%	(c)	213.60%	3.78%	
25												
26	**Sun City West Water / ACC Staff's Rates of Return by Meter Size**							**ACC Staff Recommends a Rate Increase**				
27	Present Rates (a)	4.47%	1.95%	14.26%	10.77%	27.10%	17.98%	29.79%	55.38%	-9.10%	-11.85%	No Meter
28	Proposed Rates (b)	6.61%	**3.10%**	**18.29%**	**14.35%**	**34.94%**	**25.20%**	**45.26%**	**91.41%**	-8.77%	-11.86%	This Size
29	Percent Change	47.61%	59.01%	28.28%	33.25%	28.97%	40.19%	51.95%	65.07%	3.61%	-0.07%	
30												
31	**Tubac Water / ACC Staff's Rates of Return by Meter Size**							**ACC Staff Recommends a Rate Increase**				
32	Present Rates (a)	1.72%	2.04%	No Meter	-0.40%	2.67%	6.73%	-4.06%	No Meter	No Meter	No Meter	No Meter
33	Proposed Rates (b)	6.57%	7.14%	This Size	3.35%	5.99%	14.49%	-3.10%	This Size	This Size	This Size	This Size
34	Percent Change	282.37%	250.48%		(c)	124.13%	115.36%	23.73%				
35												

36 (a) Present Revenues from Company's Bill Counts. Includes Miscellaneous Revenues
37 (b) Proposed Revenues from ACC Staff's Bill Counts. Includes Miscellaneous Revenues

(c) Percentage can't be computed due to a Negative and/or Positive Return at Present and/or Proposed Returns

Arizona American
Test Year Ended December 31, 2001
Summary of ACC Staff's Present and Proposed Revenues by Meter Size for All Water Divisions
Negative Number on Percent Change Line indicates Revenues have decreased, Positive Number indicates Increase in Revenues

Exhibit
Kozoman Rebuttal Schedule 3
Page 1
Witness: Kozoman

Line No.												Total
1		**Agua Fria Water / ACC Staff's Revenues by Meter Size**					**ACC Staff Recommends a Rate Decrease**					
2		5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Revenues
3	Present Revenues (a)	3,334,444	41,750	443,710	190,418	763,772	362,757	252,893	376,895	76,869	No Meter	5,843,506
4	Proposed Revenues (b)	2,737,014	34,807	369,873	164,738	679,904	329,336	215,476	365,588	76,123	This Size	4,972,860
5	Percent Change	-17.92%	-16.63%	-16.64%	-13.49%	-10.98%	-9.21%	-14.80%	-3.00%	-0.97%		-14.90%
6												
7		**Anthem Water / ACC Staff's Revenues by Meter Size**					**ACC Staff Recommends a Rate Decrease**					
8	Present Revenues (a)	3,606	691,596	802,410	35,169	175,472	96,219	3,330	19,501	No Meter	20,135	1,847,438
9	Proposed Revenues (b)	2,319	444,462	540,565	30,015	181,895	116,953	57,346	78,871	This Size	20,233	1,472,658
10	Percent Change	-35.69%	-35.73%	-32.63%	-14.65%	**3.66%**	**21.55%**	**1622.09%**	**304.44%**		**0.48%**	-20.29%
11												
12		**Havasu Water / ACC Staff's Revenues by Meter Size**					**ACC Staff Recommends a Rate Decrease**					
13	Present Revenues (a)	278,124	No Meter	19,904	No Meter	33,343	25,194	67,516	No Meter	No Meter	No Meter	424,081
14	Proposed Revenues (b)	249,153	This Size	27,312	This Size	33,980	26,319	63,510	This Size	This Size	This Size	400,273
15	Percent Change	-10.42%		**37.21%**		**1.91%**	**4.47%**	-5.93%				-5.61%
16												
17		**Mohave Water / ACC Staff's Revenues by Meter Size**					**ACC Staff Recommends a Rate Decrease**					
18	Present Revenues (a)	3,074,418	No Meter	163,919	51,270	681,301	70,147	41,893	187,185	720	180	4,271,034
19	Proposed Revenues (b)	2,508,732	This Size	141,486	46,615	617,387	64,052	37,068	178,579	619	151	3,594,690
20	Percent Change	-18.40%		-13.69%	-9.08%	-9.38%	-8.69%	-11.52%	-4.60%	-14.09%	-16.00%	-15.84%
21												
22		**Sun City Water / ACC Staff's Revenues by Meter Size**					**ACC Staff Recommends a Rate Increase**					
23	Present Revenues (a)	2,699,560	4,973	115,782	1,735,928	929,375	82,640	77,742	414,880	2,419	No Meter	6,063,298
24	Proposed Revenues (b)	3,498,884	6,436	151,074	2,292,035	1,245,919	115,354	114,031	582,590	3,246	This Size	8,009,568
25	Percent Change	29.61%	29.41%	30.48%	32.04%	34.06%	39.59%	46.68%	40.42%	34.18%		32.10%
26												
27		**Sun City West Water / ACC Staff's Revenues by Meter Size**						**ACC Staff Recommends a Rate Increase**				
28	Present Revenues (a)	2,088,189	409	73,821	586,696	376,549	47,070	133,331	16,803	5,040	No Meter	3,327,909
29	Proposed Revenues (b)	2,280,793	453	82,970	666,029	441,869	58,990	179,025	19,247	5,639	This Size	3,735,016
30	Percent Change	9.22%	10.84%	12.39%	13.52%	17.35%	25.32%	34.27%	14.54%	11.88%		12.23%
31												
32		**Tubac Water / ACC Staff's Revenues by Meter Size**					**ACC Staff Recommends a Rate Increase**					
33	Present Revenues (a)	213,560	No Meter	18,662	4,603	11,433	2,863	No Meter	No Meter	No Meter	No Meter	251,121
34	Proposed Revenues (b)	288,555	This Size	25,681	5,796	16,638	3,441	This Size	This Size	This Size	This Size	340,112
35	Percent Change	35.12%		37.61%	25.91%	45.53%	20.16%					35.44%
36												

37 (a) Present Revenues from Company's Bill Counts. Excludes Miscellaneous Revenues
38 (b) Proposed Revenues from ACC Staff's Bill Counts. Excludes Miscellaneous Revenues

Arizona American / Sun City Water
Test Year Ended December 31, 2001
Impact of Switching Youngtown Water Service from Commercial to Irrigation Classification
Based on Usage from October 2002 through September 2003 / Company Rates

Exhibit
Kozoman Rebuttal Schedule 4
Page 1
Witness: Kozoman

Column Numbers------>	1	2	3	4	5 (Cols. 3 - 1)	6 (Cols. 4 - 2)

Company's Present and Proposed Rebuttal Rates

Line No.	Year & Month	Usage	Billing as 2 Inch Commercial Present Rates	Billing as 2 Inch Commercial Rebuttal Proposed Rates	Billing as 2 Inch Irrigation Present Rates	Billing as 2 Inch Irrigation Rebuttal Proposed Rates	Difference in Billing at Present Rates	Difference in Billing at Rebuttal Proposed Rates
1	Sept. '03	255,000	$ 274.08	$ 470.86	$ 206.75	$ 356.12	$ (67.33)	$ (114.74)
2	Aug. '03	532,000	528.92	908.52	386.80	666.36	(142.12)	(242.16)
3	July '03	654,000	641.16	1,101.28	466.10	803.00	(175.06)	(298.28)
4	June '03	691,000	675.20	1,159.74	490.15	844.44	(185.05)	(315.30)
5	May '03	578,000	571.24	981.20	416.70	717.88	(154.54)	(263.32)
6	April '03	113,000	143.44	246.50	114.45	197.08	(28.99)	(49.42)
7	March '03	-	41.00	70.52	41.00	70.52	-	-
8	Feb. '03	105,000	136.08	233.86	109.25	188.12	(26.83)	(45.74)
9	Jan. '03	108,000	138.84	238.60	111.20	191.48	(27.64)	(47.12)
10	Dec. '02	209,000	231.76	398.18	176.85	304.60	(54.91)	(93.58)
11	Nov. '02	682,000	666.92	1,145.52	484.30	834.36	(182.62)	(311.16)
12	Oct. '02	183,000	207.84	357.10	159.95	275.48	(47.89)	(81.62)
13	Totals	4,110,000	$4,256.48	$7,311.88	$3,163.50	$5,449.44	$(1,092.98)	$(1,862.44)
14								
15			Billing as 3 Inch Commercial		Billing as 3 Inch Irrigation		Difference in Billing at	
16				Rebuttal		Rebuttal		Rebuttal
17	Year &		Present	Proposed	Present	Proposed	Present	Proposed
18	Month	Usage	Rates	Rates	Rates	Rates	Rates	Rates
19								
20	Sept. '03	368,000	$ 407.04	$ 699.28	$ 309.20	$ 532.56	$ (97.84)	$ (166.72)
21	Aug. '03	325,000	367.48	631.34	281.25	484.40	(86.23)	(146.94)
22	July '03	362,000	401.52	689.80	305.30	525.84	(96.22)	(163.96)
23	June '03	295,000	339.88	583.94	261.75	450.80	(78.13)	(133.14)
24	May '03	232,000	281.92	484.40	220.80	380.24	(61.12)	(104.16)
25	April '03	398,000	434.64	746.68	328.70	566.16	(105.94)	(180.52)
26	March '03	198,000	250.64	430.68	198.70	342.16	(51.94)	(88.52)
27	Feb. '03	226,000	276.40	474.92	216.90	373.52	(59.50)	(101.40)
28	Jan. '03	213,000	264.44	454.38	208.45	358.96	(55.99)	(95.42)
29	Dec. '02	353,000	393.24	675.58	299.45	515.76	(93.79)	(159.82)
30	Nov. '02	442,000	475.12	816.20	357.30	615.44	(117.82)	(200.76)
31	Oct. '02	395,000	431.88	741.94	326.75	562.80	(105.13)	(179.14)
32	Totals	3,807,000	$4,324.20	$7,429.14	$3,314.55	$5,708.64	$(1,009.65)	$(1,720.50)
33								
34	Total Difference for 2 Inch & 3 Inch Meter, Commercial vs. Irrigation						$(2,102.63)	$(3,582.94)
35	(Line 13 + 32)							
36								

37	**Present Rates:**		**Proposed Rates**	
38		Commerical Customer Classification		
39	Monthly Minimum 2"	$ 41.00	Monthly Minimum 2"	70.52
40	Monthly Minimum 3"	$ 70.00	Monthly Minimum 3"	120.4
41	1st 8,000 Gallons/ Com.	0.73	1st 8,000 Gallons	1.26
42	Gallons in excess of 8,001	0.92	Gallons in excess of 8,001	1.58
43				
44	**Present Rates:**		**Proposed Rates**	
45		Irrigation Customer Classification		
46	Monthly Minimum 2"	$ 41.00	Monthly Minimum 2"	70.52
47	Monthly Minimum 3"	$ 70.00	Monthly Minimum 3"	120.4
48	All Gallons	0.65	All Gallons	1.12

Arizona American / Sun City Water
Test Year Ended December 31, 2001
Impact of Switching Youngtown Water Service from Commercial to Irrigation Classification
Based on Usage from October 2002 through September 2003 / ACC Staff Rates

Exhibit
Kozoman Rebuttal Schedule 4
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Witness: Kozoman

Column Numbers----->	1	2	3	4	5 (Cols. 3 - 1)	6 (Cols. 4 - 2)

Company's Present and ACC Staff Proposed Rates

Line No.	Year & Month	Usage	Billing as 2 Inch Commercial Present Rates	Billing as 2 Inch Commercial ACC Staff Proposed Rates	Billing as 2 Inch Irrigation Present Rates	Billing as 2 Inch Irrigation ACC Staff Proposed Rates	Difference in Billing at Present Rates	Difference in Billing at ACC Staff Proposed Rates
1	Sept. '03	255,000	$ 274.08	$ 384.96	$ 206.75	$ 273.37	$ (67.33)	$ (111.59)
2	Aug. '03	532,000	528.92	769.99	386.80	511.59	(142.12)	(258.40)
3	July '03	654,000	641.16	939.57	466.10	616.51	(175.06)	(323.06)
4	June '03	691,000	675.20	991.00	490.15	648.33	(185.05)	(342.67)
5	May '03	578,000	571.24	833.93	416.70	551.15	(154.54)	(282.78)
6	April '03	113,000	143.44	187.58	114.45	151.25	(28.99)	(36.33)
7	March '03	-	41.00	30.51	41.00	54.07	-	23.56
8	Feb. '03	105,000	136.08	176.46	109.25	144.37	(26.83)	(32.09)
9	Jan. '03	108,000	138.84	180.63	111.20	146.95	(27.64)	(33.68)
10	Dec. '02	209,000	231.76	321.02	176.85	233.81	(54.91)	(87.21)
11	Nov. '02	682,000	666.92	978.49	484.30	640.59	(182.62)	(337.90)
12	Oct. '02	183,000	207.84	284.88	159.95	211.45	(47.89)	(73.43)
13	Totals	4,110,000	$ 4,256.48	$ 6,079.06	$ 3,163.50	$ 4,183.44	$(1,092.98)	$(1,895.62)
14								
15			Billing as 3 Inch Commercial		Billing as 3 Inch Irrigation		Difference in Billing at	
16				ACC Staff		ACC Staff		ACC Staff
17	Year &		Present	Proposed	Present	Proposed	Present	Proposed
18	Month	Usage	Rates	Rates	Rates	Rates	Rates	Rates
19	Sept. '03	368,000	$ 407.04	$ 580.28	$ 309.20	408.80	$ (97.84)	$ (171.48)
20	Aug. '03	325,000	367.48	$ 520.51	281.25	371.82	(86.23)	(148.69)
21	July '03	362,000	401.52	$ 571.94	305.30	403.64	(96.22)	(168.30)
22	June '03	295,000	339.88	$ 478.81	261.75	346.02	(78.13)	(132.79)
23	May '03	232,000	281.92	$ 391.24	220.80	291.84	(61.12)	(99.40)
24	April '03	398,000	434.64	$ 621.98	328.70	434.60	(105.94)	(187.38)
25	March '03	198,000	250.64	$ 343.98	198.70	262.60	(51.94)	(81.38)
26	Feb. '03	226,000	276.40	$ 382.90	216.90	286.68	(59.50)	(96.22)
27	Jan. '03	213,000	264.44	$ 364.83	208.45	275.50	(55.99)	(89.33)
28	Dec. '02	353,000	393.24	$ 559.43	299.45	395.90	(93.79)	(163.53)
29	Nov. '02	442,000	475.12	$ 683.14	357.30	472.44	(117.82)	(210.70)
30	Oct. '02	395,000	431.88	$ 617.81	326.75	432.02	(105.13)	(185.79)
31	Totals	3,807,000	$ 4,324.20	$ 6,116.87	$ 3,314.55	$ 4,381.86	$(1,009.65)	$(1,735.01)
32								
33	Total Difference for 2 Inch & 3 Inch Meter, Commercial vs. Irrigation (Line 13 + 32)						$(2,102.63)	$(3,630.63)

	Present Rates:		**ACC Staff Proposed Rates**	
		Commerical Customer Classification		
34	Monthly Minimum 2"	$ 41.00	Monthly Minimum 2"	$ 54.07
35	Monthly Minimum 3"	$ 70.00	Monthly Minimum 3"	$ 92.32
36	1st 8,000 Gallons/ Com.	$ 0.73	1st 4,000 Gallons	$ 0.78
37	Gallons in excess of 8,001	$ 0.92	Gallons from 4,001 to 100,000	$ 1.17
38			Gallons Over 100,001	$ 1.39
39				
40	**Present Rates:**		**ACC Staff Proposed Rates**	
41		Irrigation Customer Classification		
42	Monthly Minimum 2"	$ 41.00	Monthly Minimum 2"	$ 54.07
43	Monthly Minimum 3"	$ 70.00	Monthly Minimum 3"	$ 92.32
44	All Gallons	$ 0.65	All Gallons	$ 0.86

Arizona American / Sun City Water
Test Year Ended December 31, 2001
Impact of Switching Youngtown Water Service from Commercial to Irrigation Classification
Based on Usage from October 2002 through September 2003 / RUCO Staff Rates

Exhibit
Kozoman Rebuttal Schedule 4
Page 3
Witness: Kozoman

Column Numbers----->	1	2	3	4	5 (Cols. 3 - 1)	6 (Cols. 4 - 2)

Company's Present and RUCO Staff Proposed Rates

Line No.	Year & Month	Usage	Billing as 2 Inch Commercial Present Rates	Billing as 2 Inch Commercial RUCO Staff Proposed Rates	Billing as 2 Inch Irrigation Present Rates	Billing as 2 Inch Irrigation RUCO Staff Proposed Rates	Difference in Billing at Present Rates	Difference in Billing at RUCO Staff Proposed Rates
1	Sept. '03	255,000	$ 274.08	$ 367.53	$ 206.75	$ 540.78	$ (67.33)	$ 173.25
2	Aug. '03	532,000	528.92	724.86	386.80	1,083.70	(142.12)	358.84
3	July '03	654,000	641.16	882.24	466.10	1,322.82	(175.06)	440.58
4	June '03	691,000	675.20	929.97	490.15	1,395.34	(185.05)	465.37
5	May '03	578,000	571.24	784.20	416.70	1,173.86	(154.54)	389.66
6	April '03	113,000	143.44	184.35	114.45	262.46	(28.99)	78.11
7	March '03	-	41.00	40.98	41.00	40.98	-	-
8	Feb. '03	105,000	136.08	174.03	109.25	246.78	(26.83)	72.75
9	Jan. '03	108,000	138.84	177.90	111.20	252.66	(27.64)	74.76
10	Dec. '02	209,000	231.76	308.19	176.85	450.62	(54.91)	142.43
11	Nov. '02	682,000	666.92	918.36	484.30	1,377.70	(182.62)	459.34
12	Oct. '02	183,000	207.84	274.65	159.95	399.66	(47.89)	125.01
13	Totals	4,110,000	$ 4,256.48	$ 5,767.26	$ 3,163.50	$ 8,547.36	$(1,092.98)	$ 2,780.10
14								
15								
16			Billing as 3 Inch Commercial		Billing as 3 Inch Irrigation		Difference in Billing at	
17				RUCO Staff		RUCO Staff		RUCO Staff
18	Year &		Present	Proposed	Present	Proposed	Present	Proposed
19	Month	Usage	Rates	Rates	Rates	Rates	Rates	Rates
20	Sept. '03	368,000	$ 407.04	$ 542.28	$ 309.20	791.27	$ (97.84)	$ 248.99
21	Aug. '03	325,000	367.48	$ 486.81	281.25	706.99	(86.23)	220.18
22	July '03	362,000	401.52	$ 534.54	305.30	779.51	(96.22)	244.97
23	June '03	295,000	339.88	$ 448.11	261.75	648.19	(78.13)	200.08
24	May '03	232,000	281.92	$ 366.84	220.80	524.71	(61.12)	157.87
25	April '03	398,000	434.64	$ 580.98	328.70	850.07	(105.94)	269.09
26	March '03	198,000	250.64	$ 322.98	198.70	458.07	(51.94)	135.09
27	Feb. '03	226,000	276.40	$ 359.10	216.90	512.95	(59.50)	153.85
28	Jan. '03	213,000	264.44	$ 342.33	208.45	487.47	(55.99)	145.14
29	Dec. '02	353,000	393.24	$ 522.93	299.45	761.87	(93.79)	238.94
30	Nov. '02	442,000	475.12	$ 637.74	357.30	936.31	(117.82)	298.57
31	Oct. '02	395,000	431.88	$ 577.11	326.75	844.19	(105.13)	267.08
32	Totals	3,807,000	$ 4,324.20	$ 5,721.75	$ 3,314.55	$ 8,301.60	$(1,009.65)	$ 2,579.85
33								
34	Total Difference for 2 Inch & 3 Inch Meter, Commercial vs. Irrigation						$(2,102.63)	$ 5,359.95
35	(Line 13 + 32)							
36								

	Present Rates:		RUCO Staff Proposed Rates	
		Commerical Customer Classification		
39	Monthly Minimum 2"	$ 41.00	Monthly Minimum 2"	$ 40.99
40	Monthly Minimum 3"	$ 70.00	Monthly Minimum 3"	$ 69.99
41	1st 8,000 Gallons/ Com.	$ 0.73	1st 8,000 Gallons/ Com.	$ 0.99
42	Gallons in excess of 8,001	$ 0.92	Gallons in excess of 8,001	$ 1.29
43				
44				
45	**Present Rates:**		**RUCO Staff Proposed Rates**	
46		Irrigation Customer Classification		
47	Monthly Minimum 2"	$ 41.00	Monthly Minimum 2"	$ 40.99
48	Monthly Minimum 3"	$ 70.00	Monthly Minimum 3"	$ 69.99
49	All Gallons	$ 0.65	All Gallons	$ 1.96

AGUA FRIA
WATER DIVISION

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Present Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-1
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and Revenue Annualizations	5,843,506	3,334,444	41,750	443,710	190,418	763,772	362,757	252,893	376,895	76,869	-
Misc. Revenue **(a)**	339,961	339,961									
Total Revenues	6,183,467	3,674,405	41,750	443,710	190,418	763,772	362,757	252,893	376,895	76,869	-
Operating Expenses **(b)**	2,242,721	1,535,577	15,158	131,586	41,780	170,627	77,691	62,668	156,038	51,596	-
Depreciation and Amortization **(b)**	1,279,712	866,875	9,717	93,330	20,072	85,021	50,701	21,790	87,090	45,116	-
Property Tax **(c)**	293,920	174,656	1,984	21,091	9,051	36,304	17,243	12,021	17,915	3,654	-
Income Tax **(d)**	732,435	-	-	-	-	-	-	-	-	-	-
Total Operating Expenses	4,548,787	2,577,107	26,859	246,007	70,904	291,952	145,635	96,480	261,043	100,366	-
Operating Income	1,634,680	1,097,298	14,890	197,703	119,514	471,819	217,122	156,413	115,853	(23,497)	-
Interest Expense **(e)**	472,129	342,679	3,489	31,532	6,114	27,657	15,611	6,283	25,794	12,971	-
Net Income	1,162,551	754,619	11,401	166,171	113,400	444,162	201,511	150,130	90,059	(36,468)	-
Rate Base **(f)**	16,742,163	12,151,734	123,728	1,118,142	216,792	980,751	553,577	222,805	914,671	459,962	-
Rate of Return **(g)**	9.76%	9.03%	12.03%	17.68%	55.13%	48.11%	39.22%	70.20%	12.67%	-5.11%	

(a) Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	1,894,986										
Percent of Taxable Income		39.82%	0.60%	8.77%	5.98%	23.44%	10.63%	7.92%	4.75%	-1.92%	0.00%
Income Tax		732,435	732,435	732,435	732,435	732,435	732,435	732,435	732,435	732,435	732,435
Allocated Income Tax		291,669	4,407	64,227	43,831	171,674	77,886	58,027	34,809	(14,095)	-
Income Tax											
Property Tax Allocation	293,920	59.42%	0.68%	7.18%	3.08%	12.35%	5.87%	4.09%	6.10%	1.24%	0.00%
Property Tax Allocation	293,920	174,656	1,984	21,090.91	9,051.14	36,304.44	17,242.95	12,020.79	17,915.01	3,653.82	-

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Proposed Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-2
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and **(1)**	4,972,860	2,737,014	34,807	369,873	164,738	679,904	329,336	215,476	365,588	76,123	
Revenue Annualizations	-										
Misc. Revenue **(a)**	339,961	339,961									
Total Revenues	5,312,821	3,076,975	34,807	369,873	164,738	679,904	329,336	215,476	365,588	76,123	-
Operating Expenses **(b)**	2,242,721	1,535,577	15,158	131,586	41,780	170,627	77,691	62,668	156,038	51,596	-
Depreciation and Amortization **(b)**	1,279,712	866,875	9,717	93,330	20,072	85,021	50,701	21,790	87,090	45,116	-
Property Tax **(c)**	293,920	170,227	1,926	20,462	9,114	37,614	18,220	11,921	20,225	4,211	-
Income Tax **(d)**	395,729	62,437	1,745	35,914	33,864	138,685	64,560	43,583	29,531	(14,592)	-
Total Operating Expenses	4,212,081	2,635,115	28,546	281,292	104,831	431,947	211,172	139,962	292,884	86,331	-
Operating Income	1,100,740	441,860	6,261	88,580	59,907	247,957	118,164	75,514	72,704	(10,208)	-
Interest Expense **(e)**	472,129	342,679	3,489	31,532	6,114	27,657	15,611	6,283	25,794	12,971	-
Net Income	628,611	99,181	2,772	57,049	53,793	220,300	102,553	69,231	46,910	(23,179)	-
Rate Base **(f)**	16,742,163	12,151,734	123,728	1,118,142	216,792	980,751	553,577	222,805	914,671	459,962	-
Rate of Return **(g)**	6.57%	3.64%	5.06%	7.92%	27.63%	25.28%	21.35%	33.89%	7.95%	-2.22%	
Percent of Total Customers		92.187%	0.754%	4.583%	0.469%	1.223%	0.400%	0.092%	0.215%	0.077%	

(1) Revenues are from ACC Staff Proposed Rates Bill Count.
(a) Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	1,024,340										
Percent of Taxable Income		16%	0%	9%	9%	35%	16%	11%	7%	-4%	0%
Income Tax		395,729	395,729	395,729	395,729	395,729	395,729	395,729	395,729	395,729	395,729
Allocated Income Tax		62,437	1,745	35,914	33,864	138,685	64,560	43,583	29,531	(14,592)	-
Percent of Revenues		57.92%	0.66%	6.96%	3.10%	12.80%	6.20%	4.06%	6.88%	1.43%	0.00%
Property Tax Allocation	293,920	170,227	1,926	20,462	9,114	37,614	18,220	11,921	20,225	4,211	-

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2000
Cost of Service Study Using Commodity / Demand Method
Allocation of Assets to Customer Classes Using ACC Staff Net Plant

Exhibit
Rebuttal Schedule G-3
Page 1
Witness: Kozoman

Line No.		Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
1	Plant, Minus Accumulated Depreciation, Advances and Contributions in Aid and Meter Deposits (from Schedule G-5, Page 1)											
2	Commodity	742,267	367,864	4,301	45,212	24,262	97,198	41,369	43,058	93,660	25,342	-
3	Demand	8,735,844	5,650,442	69,287	702,299	143,759	599,546	392,156	141,402	659,878	377,073	-
4	Customer	3,283,188	3,026,673	24,743	150,475	15,401	40,144	13,129	3,030	7,069	2,525	-
5	Service	2,385,157	2,131,961	17,428	120,922	13,293	45,004	19,537	6,553	22,443	8,015	-
6	Meter	1,595,709	974,794	7,969	99,234	20,077	198,860	87,386	28,762	131,620	47,007	-
7	Totals	16,742,163	12,151,734	123,728	1,118,142	216,792	980,751	553,577	222,805	914,671	459,962	-
8												
9												
10	Commodity	-	-	-	-	-	-	-	-	-	-	-
11	Demand	-	-	-	-	-	-	-	-	-	-	-
12	Customer											
13	Service											
14	Meter											
15	Totals	-	-	-	-	-	-	-	-	-	-	-
16												
17												
18				-	-	-	-	-	-	-		
19				-	-	-	-	-	-	-	-	-
20				-	-	-	-	-	-	-		
21				-	-	-	-	-	-	-	-	-
22												
23	Net Rate Base	16,742,163	12,151,734	123,728	1,118,142	216,792	980,751	553,577	222,805	914,671	459,962	-

	Total ACC Staff Interest	Allocated Interest Expense to Customer Classes									
Interest Expense Allocation:	472,129	342,679	3,489	31,532	6,114	27,657	15,611	6,283	25,794	12,971	-
Ratio of rate bases to total rate base		72.5816%	0.7390%	6.6786%	1.2949%	5.8580%	3.3065%	1.3308%	5.4633%	2.7473%	0.0000%

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Customer Classes Using ACC Staff Expenses

Exhibit
Rebuttal Schedule G-4
Page 1
Witness: Kozoman

	Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Operation and Maintenance Expense (from Schedule G-6, Page 1)											
Commodity	929,778	460,795	5,388	56,634	30,391	121,752	51,820	53,936	117,320	31,743	-
Demand	372,213	240,752	2,952	29,923	6,125	25,545	16,709	6,025	28,116	16,066	-
Customer	789,158	727,502	5,947	36,169	3,702	9,649	3,156	728	1,699	607	-
Service	49,252	44,024	360	2,497	274	929	403	135	463	166	-
Meter	102,319	62,505	511	6,363	1,287	12,751	5,603	1,844	8,440	3,014	-
Totals	2,242,721	1,535,577	15,158	131,586	41,780	170,627	77,691	62,668	156,038	51,596	-
Depreciaton Expense on Plant (from Schedule G-6, Page 2)											
Commodity	96,829	47,988	561	5,898	3,165	12,680	5,397	5,617	12,218	3,306	-
Demand	931,034	602,203	7,384	74,848	15,321	63,897	41,795	15,070	70,327	40,187	-
Customer	141,251	130,215	1,064	6,474	663	1,727	565	130	304	109	-
Service	66,815	59,723	488	3,387	372	1,261	547	184	629	225	-
Meter	43,782	26,746	219	2,723	551	5,456	2,398	789	3,611	1,290	-
Totals	1,279,712	866,875	9,717	93,330	20,072	85,021	50,701	21,790	87,090	45,116	-
Total Expenses (excluding Income Tax and Property Taxes)	3,522,433	2,402,452	24,875	224,916	61,853	255,648	128,392	84,459	243,127	96,712	-

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Rate Base by Function Using ACC Staff Plant and Accumulated Depreciation

Exhibit
Rebuttal Schedule G-5
Page 1
Witness: Kozoman

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Rate Base							
Plant minus (Accumulated Depreciation Contributions in Aid of Construction Advances in Aid of Construction and Meter Deposits)	16,742,163	8,735,844	742,267	3,283,188	1,595,709	2,385,157	16,742,163
	16,742,163	8,735,844	742,267	3,283,188	1,595,709	2,385,157	16,742,163

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Allocation of Property Taxes to Functions							
Revenue Requirement by Function	5,313,712	2,206,605	1,156,991	1,295,716	305,726	348,674	5,313,712
						-	-
Total Revenue Requirement	5,313,712	2,206,605	1,156,991	1,295,716	305,726	348,674	5,313,712
Property Taxes Allocation	293,920	122,055	63,997	71,670	16,911	19,286	293,920

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of
Construction and Meter Deposits Using ACC Staff Plant and Accumulated Depreciation to Functions

Exhibit
Rebuttal Schedule G-5
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accum. Depr. Adjustments. (Adj. 1)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible												
301.00	Organization	1,229	-		1,229	-	1,229	1,229					1,229
302.00	Franchises	78,887	-		78,887	-	78,887	78,887					78,887
303.00	Miscellaneous Intangibles	115,264	-		115,264	-	115,264	115,264					115,264
Total Intangible Plant		195,380	-		195,380	-	195,380						-
													-
	Source of Supply												-
310.00	Land and Land Rights	213,063	-		213,063	0	213,063	213,063					213,063
311.00	Structures and Improvements	1,189,507	43,705	(4,402)	1,150,204	14,215	1,135,990	1,135,990					1,135,990
312.00	Collecting and Impounding Res.	-	-		-	-	-	-					-
313.00	Lakes, Rivers, Other Intakes	-	-		-	-	-	-	-				-
314.00	Wells and Springs	4,052,408	284,050		3,768,358	50,909	3,717,449	3,345,704	371,745				3,717,449
Total Source of Supply Plant		5,454,978	327,755	(4,402)	5,131,625	65,123	5,066,501						-
													-
	Pumping												-
320.00	Land and Land Rights	47,681	-		47,681	-	47,681	47,681					47,681
321.00	Structures and Improvements	1,246,735	43,850		1,202,885	10,406	1,192,480	1,073,232	119,248				1,192,480
323.00	Other Power Production	-	-		-	-	-	-	-				-
325.00	Electric Pumping Equipment	14,614,342	1,663,002	(4,761)	12,956,101	321,178	12,634,923	11,371,431	1,263,492				12,634,923
326.00	Diesel Pumping Equipment	25,799	18,816		6,983	570	6,413	5,772	641				6,413
328.10	Gas Engine Pumping Equipment	697	292		405	15	389	350	39				389
Total Pumping Plant		15,935,254	1,725,960	(4,761)	14,214,055	332,169	13,881,886						-
					-								-
	Water Treatment				-								-
330.00	Land and Land Rights	-	-		-	-	-	-					-
331.00	Structures and Improvements	39,917	-		39,917	3,430	36,487	32,838	3,649				36,487
332.00	Water Treatment Equipment	374,055	44,052	(1,583)	331,587	4,450	327,137	294,423	32,714				327,137
Total Water Treatment Plant		413,972	44,052	(1,583)	371,504	7,880	363,624						-
													-
	Transmission and Distribution				-								-
340.00	Land and Land Rights	225	-		225	-	225	225					225
341.00	Structures and Improvements	-	-		-	-	-	-	-				-
342.00	Distribution, Reservoirs, & ST	3,090,645	(3,199)	(6,944)	3,100,789	23,885	3,076,904	2,769,213	307,690				3,076,904
343.00	Transmission and Distribution	21,459,474	1,577,034	(1,946)	19,884,387	163,562	19,720,825	17,748,742	1,972,082				19,720,825
344.00	Fire Mains	-	-		-	-	-						-
345.00	Services	2,694,167	258,328		2,435,839	33,393	2,402,446					2,402,446	2,402,446
346.00	Meters	1,744,305	126,715		1,617,590	21,881	1,595,709				1,595,709		1,595,709
348.00	Hydrants	2,805,185	213,717		2,591,468	27,987	2,563,482			2,563,482			2,563,482
349.00	Other Transmission & Distribution	-	-		-	-	-	-	-				-
Total Transmission and Distribution Plant		31,794,001	2,172,595	(8,891)	29,630,297	270,708	29,359,589						

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of Construction and Meter Deposits

Exhibit
Rebuttal Schedule G-5
Page 2a
Witness: Kozoman

		ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accumulated Depr. Adj. (Adj. 1)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
ALLOCATED COMMON PLANT													
Maricopa Common Plant													
389.00	Land and Land Rights	681	-		681	-	681	681					681
390.00	Structures and Improvements	467,707	43,425		424,282	996	423,285	423,285					423,285
391.00	Office Funiture and Equipment	230,306	50,343		179,963	1,732	178,231			178,231			178,231
391.10	Computer Equipment	272,602	(60,705)		333,307	1,250	332,058			332,058			332,058
392.00	Transportation Equipment	251,004	144,977		106,027	36,180	69,847	17,462		52,385			69,847
393.00	Stores Equipment	4,012	1,087		2,925	-	2,925			2,925			2,925
394.00	Tools, Shop and Garage	57,402	2,547		54,855	74	54,781			54,781			54,781
395.00	Laboratory Equipment	18,183	3,205		14,978	-	14,978			14,978			14,978
396.00	Power Operated Equipment	16,803	5,979		10,824	-	10,824	2,706		8,118			10,824
397.00	Communication Equipment	122,529	46,447		76,082	196	75,887	18,972		56,915			75,887
398.00	Miscellaneous Equipment	38,697	17,939		20,758	1,443	19,315			19,315			19,315
Total Common Plant		1,479,926	255,243	-	1,224,683	41,870	1,182,812						
Post Close Plant Adjustments, from Company Sch. B-2		(197,198)			197,198		197,198	177,478	19,720				197,198
					-		-	-					-
	TOTAL WATER PLANT	55,273,511	4,328,408	(19,638)	50,964,741	717,750	50,246,990	38,874,628	4,091,020	3,283,188	1,595,709	2,402,446	50,246,990
	Remove Double Booked Advance	(4,128,730)			(4,128,730)		(4,128,730)	(3,715,857)	(412,873)				(4,128,730)
	Total Plant	51,144,781			46,836,011								
	Adjustments to Accumulated Depreciation												
	Company's additional Accumulated Depreciation Adjustment		717,750		(717,750)								-
			5,046,158										
	Total Net Plant				46,118,260								
	ACC Staffs Accumlated Depreciation	5,026,521											
	Advances in Aid of Construction				27,385,370		(27,385,370)	(24,646,833)	(2,738,537)				(27,385,370)
	Contributions in Aid of Construction				1,973,438		(1,973,438)	(1,776,094)	(197,344)				(1,973,438)
	Customer Meter Deposits				17,289		(17,289)					(17,289)	(17,289)
	Total Rate Base				16,742,163		16,742,163	8,735,844	742,267	3,283,188	1,595,709	2,385,157	16,742,163

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of ACC Staff Expenses to Functions

Exhibit
Rebuttal Schedule G-6
Page 1
Witness: Kozoman

		ACC Staff Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Salaries and Wages	(a)	415,526	98,789	10,977	259,704	46,056	-	415,526
Purchased Water		284,800		284,800				284,800
Purchased Power		601,887		601,887				601,887
Chemicals		10,523		10,523				10,523
Repairs and Maintenance	(b)	207,685	156,623		-	1,809	49,252	207,685
Office Supplies and Expense		36,793			36,793			36,793
Outside Services		66,131			66,131			66,131
Service Company Charges		-	-	-	-	-	-	-
Water Testing		8,614		8,614				8,614
Rents		25,840			25,840			25,840
Transportation Expenses		-			-			-
Insurance - General Liability		49,732			49,732			49,732
Insurance - Health and Life		-	-		-			-
Regulatory Commission Expense - Rate Case		43,906			43,906			43,906
Miscellaneous Expense		447,624	106,421	11,825	279,765	49,614	-	447,624
Depreciation Expense, Allocated on Rebuttal Schedule G-6, Page 2								-
Taxes Other Than Income		43,660	10,380	1,153	27,288	4,839	-	43,660
Property Taxes, Allocated on Rebuttal Schedules G-1 & G-2				-	-			-
Income Tax, Allocated on Rebuttal Schedules G-1 & G-2								
		2,242,721	372,213	929,778	789,158	102,319	49,252	2,242,721

(a) Labor (Wages and Salaries) factor computations shown on Rebuttal Schedule G-7, Page 2a
(b) Repairs and Maintenance allocation factors computation shown on Rebuttal Schedule G-7, Page 2a

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciatio Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible										-
301.00	Organization	1,229		-							-
302.00	Franchises	78,887		-							-
303.00	Miscellaneous Intangibles	115,264		-							-
	Subtotal Intangible	195,380		-							-
											-
	Source of Supply										-
310.00	Land and Land Rights	213,063		-							-
311.00	Structures and Improvements	1,189,507	2.500%	29,738	29,738	29,738					29,738
312.00	Collecting and Impounding Res.	-		-	-	-					-
313.00	Lakes, Rivers, Other Intakes	-		-	-						-
314.00	Wells and Springs	4,052,408	2.520%	102,121	102,121	91,909	10,212				102,121
	Subtotal Source of Supply	5,454,978		131,858							-
											-
	Pumping										-
320.00	Land and Land Rights	47,681		-	-						-
321.00	Structures and Improvements	1,246,735	1.670%	20,820	20,820	18,738	2,082				20,820
323.00	Other Power Production	-		-	-	-	-				-
325.00	Electric Pumping Equipment	14,614,342	4.420%	645,954	645,954	581,359	64,595				645,954
326.00	Diesel Pumping Equipment	25,799	4.420%	1,140	1,140	1,026	114				1,140
328.10	Gas Engine Pumping Equipment	697	4.420%	31	31	28	3				31
	Subtotal Pumping	15,935,254		667,946							-
											-
	Water Treatment										-
330.00	Land and Land Rights	0		0.00%	-						-
331.00	Structures and Improvements	39,917	1.670%	667	667	600	67				667
332.00	Water Treatment Equipment	374,055	4.000%	14,962	14,962	13,466	1,496				14,962
	Subtotal Water Treatment	413,972		15,629							-
											-
	Transmission and Distribution										-
340.00	Land and Land Rights	225		-	-						-
341.00	Structures and Improvements	-		-	-	-	-				-
342.00	Distribution, Reservoirs, & ST	3,090,645	1.670%	51,614	51,614	46,452	5,161				51,614
343.00	Transmission and Distribution	21,459,474	1.530%	328,330	328,330	295,497	32,833				328,330
344.00	Fire Mains	-		-	-						-
345.00	Services	2,694,167	2.480%	66,815	66,815					66,815	66,815
346.00	Meters	1,744,305	2.510%	43,782	43,782				43,782		43,782
348.00	Hydrants	2,805,185	2.000%	56,104	56,104			56,104			56,104
349.00	Other Transmission & Distribution	-		-	-	-	-				-
	Subtotal Transmission and Distribution	31,794,001		546,645							

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2a
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciation Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	General										
389.00	Land and Land Rights	681	0.000%	-							-
390.00	Structures and Improvements	467,707	1.681%	7,861	7,861	7,861					7,861
391.00	Office Funiture and Equipment	230,306	4.545%	10,468	10,468			10,468			10,468
391.10	Computer Equipment	272,602	4.545%	12,390	12,390			12,390			12,390
392.00	Transportation Equipment	251,004	25.000%	62,751	62,751	15,688		47,063			62,751
393.00	Stores Equipment	4,012	3.921%	157	157			157			157
394.00	Tools, Shop and Garage	57,402	4.135%	2,374	2,374			2,374			2,374
395.00	Laboratory Equipment	18,183	3.710%	675	675			675			675
396.00	Power Operated Equipment	16,803	5.144%	864	864	216		648			864
397.00	Communication Equipment	122,529	10.278%	12,593	12,593	3,148		9,445			12,593
398.00	Miscellaneous Equipment	38,697	4.979%	1,927	1,927			1,927			1,927
	Subtotal General	1,479,926		112,060				-			
								-			-
						-					-
	ACC Plant	55,273,511		1,474,138							-
				-							-
											-
Amortization of Deferred Regulatory Assets		109,279	2.670%	2,918	2,918	2,918					2,918
											-
						-					-
						-					-
					-	-					-
Less: Amotization of Contributions		1,973,438	10.00%	(197,344)	(197,344)	(177,609)	(19,734)				(197,344)
Total Depreciation Expense				1,279,712	1,279,712	931,034	96,829	141,251	43,782	66,815	1,279,712

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
SUMMARY OF COMMODITY - DEMAND METHOD FUNCTION FACTORS

Exhibit
Rebuttal Schedule G-7
Page 1
Witness: Kozoman

Line No.	Description	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Totals
1												
2												
3	Commodity	49.560%	0.579%	6.091%	3.269%	13.095%	5.573%	5.801%	12.618%	3.414%	0.00%	100.00%
4	Demand	64.681%	0.793%	8.039%	1.646%	6.863%	4.489%	1.619%	7.554%	4.316%	0.00%	100.00%
5	Customer	92.187%	0.754%	4.583%	0.469%	1.223%	0.400%	0.092%	0.215%	0.077%	0.00%	100.00%
6	Services	89.385%	0.731%	5.070%	0.557%	1.887%	0.819%	0.275%	0.941%	0.336%	0.00%	100.00%
7	Meters	61.088%	0.499%	6.219%	1.258%	12.462%	5.476%	1.802%	8.248%	2.946%	0.00%	100.00%
8												
9												
10												
11												
12												
13												

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
COMMODITY - DEMAND METHOD FUNCTION FACTORS
Plant and Depreciation Expense Allocations

Exhibit
Rebuttal Schedule G-7
Page 2
Witness: Kozoman

Line No.	Description	Total	Demand	Commodity	Customer
1					
2					
3	Wells	1.00	0.90	0.10	
4	Pumps & Equipment	1.00	0.90	0.10	
5	Distribution Mains	1.00	0.90	0.10	
6	Customer	1.00			1.00
7	Services	1.00			1.00
8	Meters	1.00			1.00
9	Fire Hydrants	1.00			1.00
10	Transportation Equip.	1.00	0.25		0.75
11	Office Furniture	1.00			1.00
12	Communication Equip.	1.00	0.25		0.75
13					
14	**To Approximately Match ACC Staff Proposed Rates for 5/8 Inch Meter**				
15	Demand and Commodity Allocation to Wells, Pumps and Equipment and				
16	Distribution Mains would need to be changed to approximately match				
17	ACC Staff's proposed monthly minimums and commodity rates. The				
18	match would be ACC Staff's Proposed Rates to Computed Monthly				
19	Minimum and Commodity rate WITHOUT Equity returns and				
20	Income Taxes. Match would be based on cost only.				
21					
22		**Required Allocations:**			
23	Description	Total	Demand	Commodity	Customer
24	Wells	1.00	-0.25	1.25	
25	Pumps & Equipment	1.00	-0.25	1.25	
26	Distribution Mains	1.00	-0.25	1.25	
27					
28					
29					
30					
31					
32					
33					

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 2a
Witness: Kozoman

Labor Allocation Factors	
Pumping Labor	26.42%
Meter Labor	11.08%
Customer Labor	62.50%
	100.00%

Repairs and Maintenance Allocation Factors	
Repairs and Maintenance Demand	0.00%
Repairs and Maintenance Pumping	75.41%
Repairs and Maintenance Mains	0.00%
Repairs and Maintenance Services	23.71%
Repairs and Maintenance Meters	0.87%
Repairs and Maintenance Customer	0.00%
	100.00%

Computations shown on this work sheet are from page labeled asTrial Balance in this work book. Allocation percentage were computed based on Expenses charged by Citizens Utilities and are then applied to proforma amounts.

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF CLASS ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 3
Witness: Kozoman

COMMODITY ALLOCATION FACTOR

Meter Size	(a) Total Gallons (in 1,000's) In Test Year	Percent of Total
5/8" x 3/4"	1,042,685	49.56%
3/4"	12,192	0.58%
1"	128,150	6.09%
1-1/2"	68,770	3.27%
2"	275,500	13.09%
3"	117,258	5.57%
4"	122,046	5.80%
6"	265,471	12.62%
8"	71,829	3.414%
10"	-	0.000%
Totals	2,103,901	100.00%

DEMAND ALLOCATION FACTOR

Meter Size	(a) Number of Meters and/or Services	Equiv-alent Weight	Equivalent Number of Meters and/or Services	Percent of Total
5/8" x 3/4	11,988	1.0	11,988	64.68%
3/4"	98	1.5	147	0.79%
1"	596	2.5	1,490	8.04%
1-1/2"	61	5.0	305	1.65%
2"	159	8.0	1,272	6.86%
3"	52	16.0	832	4.49%
4"	12	25.0	300	1.62%
6"	28	50.0	1,400	7.55%
8"	10	80.0	800	4.32%
10"	-	160.0	0	0.00%
Totals	13,004		18,534	100.00%

CUSTOMER ALLOCATION FACTOR

Meter Size	Number of Meters	Percent of Total
5/8" x 3/4"	11,988	92.19%
3/4"	98	0.75%
1"	596	4.58%
1-1/2"	61	0.47%
2"	159	1.22%
3"	52	0.40%
4"	12	0.09%
6"	28	0.22%
8"	10	0.08%
10"	0	0.00%
Totals	13,004	100.00%

SERVICES ALLOCATION FACTOR (b)

Meter Size	Number of Services	Install-ation Cost	Weighted Number Services	Percent of Total
5/8" x 3/4	11,988	$ 355.00	4,255,740	89.38%
3/4"	98	355.00	34,790	0.73%
1"	596	405.00	241,380	5.07%
1-1/2"	61	435.00	26,535	0.56%
2"	159	565.00	89,835	1.89%
3"	52	750.00	39,000	0.82%
4"	12	1,090.00	13,080	0.27%
6"	28	1,600.00	44,800	0.94%
8"	10	1,600.00	16,000	0.34%
10"	0	1,600.00	0	0.00%
Totals	13,004		4,761,160	100.00%

METER ALLOCATION FACTOR (b)

Meter Size	Number of Meters	Meter Cost	Weighted Dollars of Meters	Percent of Total
5/8" x 3/4"	11,988	$ 105.00	1,258,740	61.09%
3/4"	98	105.00	10,290	0.50%
1"	596	215.00	128,140	6.22%
1-1/2"	61	425.00	25,925	1.26%
2"	159	1,615.00	256,785	12.46%
3"	52	2,170.00	112,840	5.48%
4"	12	3,095.00	37,140	1.80%
6"	28	6,070.00	169,960	8.25%
8"	10	6,070.00	60,700	2.95%
10"	0	6,070.00	0	0.00%
Totals	13,004		2,060,520	100.00%

(a) Includes customer and gallon sold annualization

(b) Meter and Service Line cost from Arizona Corporation Commission Memo of April 23, 2002 from Marlin Scott, Jr.. Meter costs based on compound meters. Cost of service line and

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Including Debt, Equity, and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	3,283,188	2,385,157	1,595,709	7,264,053
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	92,586	67,261	44,999	204,846
4	Rate Bases	3,283,188	2,385,157	1,595,709	7,264,053
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	123,448	89,682	59,999	273,128
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	201,051	146,059	97,716	444,825
9					
10	Revenue Requirement for Debt Component, from Line 3	92,586	67,261	44,999	204,846
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	201,051	146,059	97,716	444,825
13	Total Return Requirement with Income Tax	293,637	213,320	142,715	649,671
14					
15	Property Tax Expense, from Schedule G-5, Page 1	71,670	19,286	16,911	107,868
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	789,158	49,252	102,319	940,730
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	141,251	66,815	43,782	251,848
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	1,295,716	348,674	305,726	1,950,117
19					
20	**Customer Charge**				
21	Number of Bills = 13,004 times 12	156,048			
22					
23	**Charge per Bill**	$ 8.30			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 18,534 times 12		222,408	222,408	
28					
29	**Charge per Equivalent Meter**		$ 1.57	$ 1.37	
30					
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge)				
34	Charge per Bill (Customer Charge with Equity and Income Tax)	$ 8.30			
35	Charge per Equivalent Meter (For Service Line Charge with Equity Return and Income Tax)	1.57			
36	Charge per Equivalent Meter (For Meter Charge with Equity Return and Income Tax)	1.37			
37	(Service and Meter Revenue Requirement divided by Annual Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter	$ 11.25			
39					

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Excluding Equity, and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1a
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	3,283,188	2,385,157	1,595,709	7,264,053
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	92,586	67,261	44,999	204,846
4	Rate Bases	3,283,188	2,385,157	1,595,709	7,264,053
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	0.00%	0.00%	0.00%	0.00%
6	Required Operating Income for Equity	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-
9					
10	Revenue Requirement for Debt Component, from Line 3	92,586	67,261	44,999	204,846
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	-	-	-	-
13	Total Return Requirement with Income Tax	92,586	67,261	44,999	204,846
14					
15	Property Tax Expense, from Schedule G-5, Page 1	71,670	19,286	16,911	107,868
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	789,158	49,252	102,319	940,730
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	141,251	66,815	43,782	251,848
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	1,094,665	202,616	208,011	1,505,292
19					
20	**Customer Charge**				
21	Number of Bills = 13,004 times 12	156,048			
22					
23	**Charge per Bill**	$ 7.01			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 18,534 times 12		222,408	222,408	
28					
29	**Charge per Equivalent Meter**		$ 0.91	$ 0.94	
30	**Actual Cost (without Equity Returns or Income Taxes)**				
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge, nor recovery of return or income tax)				
34	Charge per Bill (Customer Charge without Equity Return or Income Tax)	$ 7.01			
35	Charge per Equivalent Meter (For Service Line Charge without Equity Return or Income Tax)	0.91			
36	Charge per Equivalent Meter (For Meter Charge without Equity Return or Income Tax)	0.94			
37	(Service and Meter Revenue Requirement divided by Annualized Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter without recovery of Equity Return or Income Tax	$ 8.86			

Arizona American - Agua Fria Water Division
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Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Including Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	8,735,844
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	246,351
5	Rate Base	8,735,844
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%
7	Required Operating Income for Equity	328,468
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	534,952
10		
11	Revenue Requirement for Debt Component, from Line 4	246,351
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	534,952
14		
15	Property Tax Expense, from Schedule G-5, Page 1	122,055
16	Demand Expenses, from Schedule G-6, Page 1	372,213
17	Depreciation, from Schedule G-6, Page 2	931,034
18	Totals	2,206,605
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	222,408
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 9.92
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 9.92	1.0	$ 9.92
26	3/4 Inch Meter	$ 9.92	1.5	14.88
27	1 Inch Meter	$ 9.92	2.5	24.80
28	1 1/2 Inch Meter	$ 9.92	5.0	49.61
29	2 Inch Meter	$ 9.92	8.0	79.37
30	3 Inch Meter	$ 9.92	15.0	148.82
31	4 Inch Meter	$ 9.92	25.0	248.04
32	6 Inch Meter	$ 9.92	50.0	496.07
33	8 Inch Meter	$ 9.92	80.0	793.71
34	10 Inch Meter	$ 9.92	160.0	1,587.43

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Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Excluding Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2a
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	8,735,844
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	246,351
5	Rate Base	8,735,844
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	
7	Required Operating Income for Equity	-
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	-
10		
11	Revenue Requirement for Debt Component, from Line 4	246,351
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	-
14		
15	Property Tax Expense, from Schedule G-5, Page 1	122,055
16	Demand Expenses, from Schedule G-6, Page 1	372,213
17	Depreciation, from Schedule G-6, Page 2	931,034
18	Totals	1,671,653
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	222,408
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 7.52
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 7.52	1.0	$ 7.52
26	3/4 Inch Meter	$ 7.52	1.5	11.27
27	1 Inch Meter	$ 7.52	2.5	18.79
28	1 1/2 Inch Meter	$ 7.52	5.0	37.58
29	2 Inch Meter	$ 7.52	8.0	60.13
30	3 Inch Meter	$ 7.52	15.0	112.74
31	4 Inch Meter	$ 7.52	25.0	187.90
32	6 Inch Meter	$ 7.52	50.0	375.81
33	8 Inch Meter	$ 7.52	80.0	601.29
34	10 Inch Meter	$ 7.52	160.0	1,202.58

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including and Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 3
Witness: Kozoman

Including Equity Return and Income Taxes

Line No.		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended Monthly Minimum to Computed Minimum
1	5/8 x 3/4 Inch Meter	$ 8.30	$ 1.57	$ 1.37	$ 9.92	$ 21.17	$ 8.52	40.25%
2	3/4 Inch Meter	8.30	2.35	2.06	14.88	27.60	12.78	46.31%
3	1 Inch Meter	8.30	3.92	3.44	24.80	40.46	21.30	52.64%
4	1 1/2 Inch Meter	8.30	7.84	6.87	49.61	72.62	45.15	62.17%
5	2 Inch Meter	8.30	12.54	11.00	79.37	111.21	68.16	61.29%
6	3 Inch Meter	8.30	23.52	20.62	148.82	201.26	132.06	65.62%
7	4 Inch Meter	8.30	39.19	34.37	248.04	329.90	170.41	51.66%
8	6 Inch Meter	8.30	78.39	68.73	496.07	651.49	340.82	52.31%
9	8 Inch Meter	8.30	125.42	164.95	793.71	1,092.39	681.64	62.40%
10	10 Inch Meter	8.30	376.25	549.85	1,587.43	2,521.83		
11								
12	**Excluding Equity Return and Income Taxes**							
13								
14								
15								
16								
17								
18								
19		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended Monthly Minimum to Computed Minimum
20								
21	5/8 x 3/4 Inch Meter	$ 7.01	$ 0.91	$ 0.94	$ 7.52	$ 16.38	$ 8.52	52.02%
22	3/4 Inch Meter	7.01	1.37	1.40	11.27	21.06	12.78	60.69%
23	1 Inch Meter	7.01	2.28	2.34	18.79	30.42	21.30	70.02%
24	1 1/2 Inch Meter	7.01	4.56	4.68	37.58	53.83	45.15	83.88%
25	2 Inch Meter	7.01	7.29	7.48	60.13	81.91	68.16	83.21%
26	3 Inch Meter	7.01	13.67	14.03	112.74	147.45	132.06	89.56%
27	4 Inch Meter	7.01	22.78	23.38	187.90	241.08	170.41	70.69%
28	6 Inch Meter	7.01	45.55	46.76	375.81	475.14	340.82	71.73%
29	8 Inch Meter	7.01	72.88	74.82	601.29	756.01	681.64	90.16%
30	10 Inch Meter	7.01	145.76	149.64	1,202.58	1,505.00		

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses and Return

Exhibit
Schedule G-8
Page 4
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	742,267	3,283,188	2,385,157	1,595,709	8,735,844	16,742,163
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.820%	2.820%	2.820%	2.820%	2.820%	2.820%
3	Required Operating Income - for Debt	20,932	92,586	67,261	44,999	246,351	472,129
4	Rate Bases from Schedule G-5, Page 1	742,267	3,283,188	2,385,157	1,595,709	8,735,844	16,742,163
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	27,909	123,448	89,682	59,999	328,468	629,505
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	45,454	201,051	146,059	97,716	534,952	1,025,231
9							
10	Revenue Requirement for Debt Component, from Line 3	20,932	92,586	67,261	44,999	246,351	472,129
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	45,454	201,051	146,059	97,716	534,952	1,025,231
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	66,386	293,637	213,320	142,715	781,303	1,497,360
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	63,997	71,670	19,286	16,911	122,055	293,920
16	Expenses (From Sch. G-6. Page 1)	929,778	789,158	49,252	102,319	372,213	2,242,721
17	Depreciation and Amortization (From Schedule G-6, Page 2)	96,829	141,251	66,815	43,782	931,034	1,279,712
18	Total Revenue Requirement by function	1,156,991	1,295,716	348,674	305,726	2,206,605	5,313,712
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	2,103,901	156,048	222,408	222,408	222,408	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.5499					
22	(Line 18 divided by Line 20)		$ 8.30	$ 1.57	$ 1.37	$ 9.92	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 21.17	
24							

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses and Return

Exhibit
Schedule G-8
Page 4a
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	742,267	3,283,188	2,385,157	1,595,709	8,735,844	16,742,163
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	20,932	92,586	67,261	44,999	246,351	472,129
4	Rate Bases from Schedule G-5, Page 1	742,267	3,283,188	2,385,157	1,595,709	8,735,844	16,742,163
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)						
6	Required Operating Income for Equity	-	-	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	-	-	-	-	-	-
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-	-	-
9							
10	Revenue Requirement for Debt Component, from Line 3	20,932	92,586	67,261	44,999	246,351	472,129
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	-	-	-	-	-	-
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	20,932	92,586	67,261	44,999	246,351	472,129
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	63,997	71,670	19,286	16,911	122,055	293,920
16	Expenses (From Sch. G-6. Page 1)	929,778	789,158	49,252	102,319	372,213	2,242,721
17	Depreciation and Amortization (From Schedule G-6, Page 2)	96,829	141,251	66,815	43,782	931,034	1,279,712
18	Total Revenue Requirement by function	1,111,537	1,094,665	202,616	208,011	1,671,653	4,288,481
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	2,103,901	156,048	222,408	222,408	222,408	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.5283					
22	(Line 18 divided by Line 20)		$ 7.0149	$ 0.9110	$ 0.9353	$ 7.5162	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 16.38	

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **without** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 1
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4a	$ 0.5283
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	$ 7.52
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	7.01
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	0.91
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	0.94
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4a	$ 16.38

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 8.52
Proposed Commodity Rate			
0	to	4,000	$ 1.20
4,001	to	100,000	$ 1.80
Over 100,001			$ 2.15

Computed Costs, without Equity Return and Income Taxes

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Recovery of Expenses or, (Lack of Col. 9 (Col. 8-4)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	Recovery)
22	-	$ 16.38	-	$ 16.38		-	$ 8.52		$ 8.52	$ (7.86)
23	1,000	$ 16.38	$ 0.5283	$ 16.91		1,000	8.52	$ 1.20	9.72	(7.19)
24	2,000	16.38	1.06	17.43		2,000	8.52	2.40	10.92	(6.51)
25	3,000	16.38	1.58	17.96		3,000	8.52	3.60	12.12	(5.84)
26	4,000	16.38	2.11	18.49		4,000	8.52	4.80	13.32	(5.17)
27	5,000	16.38	2.64	19.02		5,000	8.52	6.60	15.12	(3.90)
28	6,000	16.38	3.17	19.55		6,000	8.52	8.40	16.92	(2.63)
29	7,000	16.38	3.70	20.08		7,000	8.52	10.20	18.72	(1.36)
30	8,000	16.38	4.23	20.60	**Usage**	8,000	8.52	12.00	20.52	(0.08)
31	**8,066**	16.38	4.26	20.64	**<-Level->**	**8,066**	8.52	12.12	20.64	0.00
32	9,000	16.38	4.75	21.13	**When**	9,000	8.52	13.80	22.32	1.19
33	10,000	16.38	5.28	21.66	**Revenues**	10,000	8.52	15.60	24.12	2.46
34	11,000	16.38	5.81	22.19	**Equal**	11,000	8.52	17.40	25.92	3.73
35	12,000	16.38	6.34	22.72	**Expenses**	12,000	8.52	19.20	27.72	5.00
36	13,000	16.38	6.87	23.25		13,000	8.52	21.00	29.52	6.27
37	14,000	16.38	7.40	23.77	**(No Rate**	14,000	8.52	22.80	31.32	7.55
38	15,000	16.38	7.92	24.30	**of Return**	15,000	8.52	24.60	33.12	8.82
39	16,000	16.38	8.45	24.83	**on**	16,000	8.52	26.40	34.92	10.09
40	17,000	16.38	8.98	25.36	**Equity**	17,000	8.52	28.20	36.72	11.36
41	18,000	16.38	9.51	25.89	**or Income**	18,000	8.52	30.00	38.52	12.63
42	19,000	16.38	10.04	26.42	**Taxes**	19,000	8.52	31.80	40.32	13.90
43	20,000	16.38	10.57	26.94	**Included)**	20,000	8.52	33.60	42.12	15.18
44	21,000	16.38	11.09	27.47		21,000	8.52	35.40	43.92	16.45
45	22,000	16.38	11.62	28.00		22,000	8.52	37.20	45.72	17.72
46	23,000	16.38	12.15	28.53		23,000	8.52	39.00	47.52	18.99
47	24,000	16.38	12.68	29.06		24,000	8.52	40.80	49.32	20.26
48	25,000	16.38	13.21	29.59		25,000	8.52	42.60	51.12	21.53
49	26,000	16.38	13.74	30.11		26,000	8.52	44.40	52.92	22.81
50	27,000	16.38	14.26	30.64		27,000	8.52	46.20	54.72	24.08
51	28,000	16.38	14.79	31.17		28,000	8.52	48.00	56.52	25.35
52	29,000	16.38	15.32	31.70		29,000	8.52	49.80	58.32	26.62
53	30,000	16.38	15.85	32.23		30,000	8.52	51.60	60.12	27.89
54	**Average Usage**					**Average Usage**				
55	7,002	16.38	3.70	20.08		7,002	8.52	10.20	18.72	**(1.35)**

Arizona American - Agua Fria Water Division
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **with** Equity Return & Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 2
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4	$0.5499
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	$ 9.92
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	8.30
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	1.37
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	1.57
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4	$ 21.17

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 8.52
Proposed Commodity Rate			
0	to	4,000	$ 1.20
4,001	to	100,000	$ 1.80
Over 100,001			$ 2.15

Computed Costs, with Equity Return and Income Taxes

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4) Recovery of Expenses Rate of Return & Income Tax or (Lack of Recovery)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	
24	-	$ 21.17	-	$ 21.17		-	$ 8.52		$ 8.52	$ (12.65)
25	1,000	$ 21.17	$0.5499	$ 21.72		1,000	8.52	$ 1.20	9.72	(12.00)
26	2,000	21.17	1.10	22.27		2,000	8.52	2.40	10.92	(11.35)
27	3,000	21.17	1.65	22.82		3,000	8.52	3.60	12.12	(10.70)
28	4,000	21.17	2.20	23.37		4,000	8.52	4.80	13.32	(10.05)
29	5,000	21.17	2.75	23.92		5,000	8.52	6.60	15.12	(8.80)
30	6,000	21.17	3.30	24.47		6,000	8.52	8.40	16.92	(7.55)
31	7,000	21.17	3.85	25.02		7,000	8.52	10.20	18.72	(6.30)
32	8,000	21.17	4.40	25.57		8,000	8.52	12.00	20.52	(5.05)
33	9,000	21.17	4.95	26.12		9,000	8.52	13.80	22.32	(3.80)
34	10,000	21.17	5.50	26.67		10,000	8.52	15.60	24.12	(2.55)
35	11,000	21.17	6.05	27.22		11,000	8.52	17.40	25.92	(1.30)
36	12,000	21.17	6.60	27.77	**Usage**	12,000	8.52	19.20	27.72	(0.05)
37	**12,040**	21.17	6.62	27.79	**<-Level->**	**12,040**	8.52	19.27	27.79	0.00
38	13,000	21.17	7.15	28.32	**When**	13,000	8.52	21.00	29.52	1.20
39	14,000	21.17	7.70	28.87	**Revenues**	14,000	8.52	22.80	31.32	2.45
40	15,000	21.17	8.25	29.42	**Equal**	15,000	8.52	24.60	33.12	3.70
41	16,000	21.17	8.80	29.97	**Expenses**	16,000	8.52	26.40	34.92	4.95
42	17,000	21.17	9.35	30.52	**and**	17,000	8.52	28.20	36.72	6.20
43	18,000	21.17	9.90	31.07	**Rate of**	18,000	8.52	30.00	38.52	7.45
44	19,000	21.17	10.45	31.62	**Return**	19,000	8.52	31.80	40.32	8.70
45	20,000	21.17	11.00	32.17	**and**	20,000	8.52	33.60	42.12	9.95
46	21,000	21.17	11.55	32.72	**Income**	21,000	8.52	35.40	43.92	11.20
47	22,000	21.17	12.10	33.27	**Taxes**	22,000	8.52	37.20	45.72	12.45
48	23,000	21.17	12.65	33.82		23,000	8.52	39.00	47.52	13.70
49	24,000	21.17	13.20	34.37		24,000	8.52	40.80	49.32	14.95
50	25,000	21.17	13.75	34.92		25,000	8.52	42.60	51.12	16.20
51	26,000	21.17	14.30	35.47		26,000	8.52	44.40	52.92	17.45
52	27,000	21.17	14.85	36.02		27,000	8.52	46.20	54.72	18.70
53	28,000	21.17	15.40	36.57		28,000	8.52	48.00	56.52	19.95
54	**Average Usage**					**Average Usage**				
55	7,002	$ 21.17	$ 3.851	$ 25.02		7,002	8.52	10.20	18.72	**(6.29)**

Arizona American - Agua Fria Water Division
Summary of Revenues by Customer Classification - Present and Proposed Rates
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

in No.	Customer Classification and/or Meter Size	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8 Inch Residential	$3,127,076	$3,193,947	$ 66,870	2.14%	52.62%	52.75%
2	3/4 Inch Residential	36,220	36,994	774	2.14%	0.61%	0.61%
3	1 Inch Residential	399,199	407,744	8,545	2.14%	6.72%	6.73%
4	1.5 Inch Residential	78,797	80,521	1,725	2.19%	1.33%	1.33%
5	2 Inch Residential	328,284	335,483	7,199	2.19%	5.52%	5.54%
6	3 Inch Residential	563	574	11	2.04%	0.01%	0.01%
7	5/8 Inch Commercial	4,629	4,727	98	2.11%	0.08%	0.08%
8	3/4 Inch Commercial	4,437	4,533	96	2.16%	0.07%	0.07%
9	1 Inch Commercial	31,984	32,673	689	2.16%	0.54%	0.54%
10	1.5 Inch Commercial	91,467	93,465	1,997	2.18%	1.54%	1.54%
11	2 Inch Commercial	359,785	367,631	7,846	2.18%	6.05%	6.07%
12	3 Inch Commercial	359,249	367,044	7,795	2.17%	6.05%	6.06%
13	6 Inch Commercial	147,370	150,629	3,259	2.21%	2.48%	2.49%
14	2 Inch Public Interruptible						
15	3 Inch Public Interruptible	4,838	4,838	-	0.00%	0.08%	0.08%
16	6 Inch Public Interruptible	282,872	282,872	-	0.00%	4.76%	4.67%
17	8 Inch Public Interruptible	71,829	71,829	-	0.00%	1.21%	1.19%
18	10 Inch Public Interruptible	7,554	7,554	-	0.00%	0.13%	0.12%
19	4 Inch Prison	248,933	253,863	4,930	1.98%	4.19%	4.19%
20	4 Inch Private Fire	2,520	2,570	50	2.00%	0.04%	0.04%
21	6 Inch Private Fire	10,890	11,108	218	2.00%	0.18%	0.18%
22	8 Inch Private Fire	4,020	4,100	80	2.00%	0.07%	0.07%
23	Miscellaneous Revenues	339,961	339,961	-	0.00%	5.72%	5.61%
24	**Subtotal Water Revenues**	$5,942,478	$6,054,661	112,183	1.89%	100.00%	100.00%
25							
26							
27			**Revenue Annualization (a)**			Additioinal	Additional Gallons to
28		**Present**	**Proposed**	**Dollar**	**Percent**	Bills to be	be Pumped
29		**Revenues**	**Revenues**	**Change**	**Change**	Issued	in 1,000's
30	5/8 Inch Residential	202,538	206,861	4,322	2.13%	9,245	100,718
31	3/4 Inch Residential	1,584	1,618	34	2.14%	47	470
32	1 Inch Residential	10,260	10,479	219	2.13%	180	2,867
33	1.5 Inch Residential	5,170	5,283	113	2.19%	19	1,890
34	2 Inch Residential	44,120	45,085	966	2.19%	104	16,153
35	3 Inch Residential	(563)	(574)	(11)	2.04%	(3)	(47)
36	5/8 Inch Commercial	201	205	4	2.09%	13	40
37	3/4 Inch Commercial	(492)	(503)	(11)	2.16%	(10)	(165)
38	1 Inch Commercial	2,266	2,315	49	2.15%	34	688
39	1.5 Inch Commercial	14,983	15,310	326	2.18%	66	5,236
40	2 Inch Commercial	31,582	32,270	687	2.18%	97	10,794
41	3 Inch Commercial	(1,330)	(1,360)	(29)	2.21%	(1)	(526)
42	6 Inch Commercial	16,136	16,494	357	2.21%	3	6,673
43	6 Inch Public Interruptible	(81,903)	(81,903)	-	0.00%	(10)	(84,017)
44	10 Inch Public Interruptible	(7,554)	(7,554)	-	0.00%	(10)	(7,554)
45	4 Inch Private Fire	1,440	1,469	29	2.00%	48	
46	6 Inch Private Fire	1,530	1,561	31	2.00%	34	
47	8 Inch Private Fire	1,020	1,040	20	2.00%	17	
48	Totals	240,990	248,096	7,106	2.95%	9,873	53,220
49	Total Revenues	6,183,467	6,302,757	119,289	1.93%		

50 **(a)** Customer Growth Annualization is calculated by computing the change in the number of customers by month from the
51 beginning of the year to the end of the year, and then multipling the additional customers times the average revenue
52 for that month

Arizona American - Agua Fria Water Division
Analysis of Revenue by Detailed Class, at Average Usage
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch Residential	11,197	7,002	$ 22.46	$ 22.94	0.48	2.14%
2	3/4 Inch Residential	87	10,027	33.78	34.50	0.72	2.14%
3	1 Inch Residential	542	17,634	60.82	62.12		
4	1.5 Inch Residential	23	102,940	279.90	286.03	6.13	2.19%
5	2 Inch Residential	58	175,037	468.40	478.68	10.27	2.19%
6	3 Inch Residential	0	15,667	186.41	190.22	3.80	2.04%
7	4 Inch Residential	-	-	-	-	-	0.00%
8	6 Inch Residential	-	-	-	-	-	0.00%
9	5/8 Inch Commercial	20	4,561	18.12	18.50	0.38	2.11%
10	3/4 Inch Commercial	8	14,989	44.90	45.87	0.97	2.16%
11	1 Inch Commercial	36	22,823	72.44	74.00	1.56	2.15%
12	1.5 Inch Commercial	31	89,393	249.56	255.01	5.45	2.18%
13	2 Inch Commercial	84	125,151	356.66	364.44	7.78	2.18%
14	3 Inch Commercial	52	188,454	573.46	585.90	12.44	2.17%
15	4 Inch Commercial	-	-	-	-	-	0.00%
16	6 Inch Commercial	3	1,816,455	4,465.18	4,563.92	98.74	2.21%
17	8 Inch Commercial	-	-	-	-	-	0.00%
18	2 Inch Public Interruptible	0	-	-	-	-	0.00%
19	3 Inch Public Interruptible	0	1,612,667	1,612.67	1,612.67	-	0.00%
20	4 Inch Public Interruptible	-	-	-	-	-	0.00%
21	6 Inch Public Interruptible	3	8,319,765	8,319.76	8,319.76	-	0.00%
22	8 Inch Public Interruptible	3	1,995,250	1,995.25	1,995.25	-	0.00%
23	10 Inch Public Interruptible	1	755,400	755.40	755.40	-	0.00%
24	4 Inch Prison	1	10,170,500	20,744.41	21,155.23	410.82	1.98%
25	Construction	-	-	-	-	-	0.00%
26	4 Inch Private Fire	7	-	30.00	30.60	0.60	2.00%
27	6 Inch Private Fire	20	-	45.00	45.90	0.90	2.00%
28	8 Inch Private Fire	6	-	60.00	61.20	1.20	2.00%
29							
30							
31	Totals	12,182					
32							
33	Actuall Year End Number						
34	of Customers:	13,004					
35							

36 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Arizona American - Agua Fria Water Division
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size	Present Rates	Proposed Rates	Percent Change
1				
2				
3				
4	**Monthly Usage Charge for:**			
5	Residential,Commercial, Irrigation, Resale and Miscellaneous Customers			
6	5/8 x 3/4 Inch	$ 10.00	$ 10.20	2.00%
7	3/4 Inch (a)	15.00	15.30	2.00%
8	1 Inch (a)	25.00	25.50	2.00%
9	1 1/2 Inch	53.00	54.06	2.00%
10	2 Inch (a)	80.00	81.60	2.00%
11	3 Inch (a)	155.00	158.10	2.00%
12	4 Inch (a)	200.00	204.00	2.00%
13	6 Inch (a)	400.00	408.00	2.00%
14	8 Inch (a)	800.00	816.00	2.00%
15	Fire Hydrant			
16				
17	Prison, 4 Inch Meter Rate	200.00	204.00	2.00%
18				
19	4 Inch Private Fire (a)	30.00	30.60	2.00%
20	6 Inch Private Fire (a)	45.00	45.90	2.00%
21	8 Inch Private Fire (a)	60.00	61.20	2.00%
22	10 Inch Private Fire (a)	120.00	122.40	2.00%
23	12 Inch Private Fire (a)	180.00	183.60	2.00%
24				
25				
26				
27				
28				
29				
30				
31				
32	Gallons In Minimum			
33	All (except construction, prison, public interruptible)	-	-	
34	Construction	-	-	
35	Prison	-	-	
36	Public Interruptible	-	-	
37				
38	**Tier 1:** Gallons / upper limit			
39	All (except construction, prison, public interruptible)	8,000	8,000	
40	Construction	99,999,999	99,999,999	
41	Prison	99,999,999	99,999,999	
42	Public Interruptible	99,999,999	99,999,999	
43				
44				
45	(a) = Rounded to nearest whole cent			
46				
47				
48				
49				

Arizona American - Agua Fria Water Division
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Sch H-3
Page 2
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1					
2					
3	**Tier 2:** (Gallon upper limit, up to, but not exceeding)				
4	All (except construction, prison, public interruptible)		99,999,999	99,999,999	
5	Construction		99,999,999	99,999,999	
6	Prison		99,999,999	99,999,999	
7	Public Interruptible		99,999,999	99,999,999	
8					
9					
10					
11					
12					
13					
14					
15	**Tier 3:** (Gallon over)				
16	All (except construction, prison, public interruptible)		99,999,999	99,999,999	
17	Construction		99,999,999	99,999,999	
18	Prison		99,999,999	99,999,999	
19	Public Interruptible		99,999,999	99,999,999	
20					
21					
22					
23					
24					
25					
26					
27	Commodity Rates (per 1,000 gallons over minimum and per Tier)				
28	All (except construction, prison) (a)	Tier 1	$ 1.78	1.82	2.25%
29	All (except construction, prison) (a)	Tier 2	2.24	2.29	2.23%
30	All (except construction, prison) (a)	Tier 3	2.24	2.29	2.23%
31	All (except construction, prison) (a)	Tier 4	2.24	2.29	2.23%
32					
33					
34	Construction , Contract Rate		$ 1.00	1.00	0.00%
35					
36	Prison		$ 2.02	2.06	1.98%
37					
38	Public Interruptible , Contract Rate		$ 1.00	1.00	0.00%
39					
40	Raw CAP Water, charge plus additions for cost increases (a)		$ 0.50	Tariff To Be Canceled	
41	(Available to golf courses and other irrigation or turf facilities)				
42					
43	Non Potable Water		N/A	$ 0.62	
44	(a) = Rounded up to next whole cent .				
45	N/A = Not applicable, as there is no existing tariff for Agua Fria, but tariff exists for Anthem Wastewater				

Arizona American - Agua Fria Water Division
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Kozoman

Line No.	Other Service Charges		Present Rates		Proposed Rates
1	Establishment	$	30.00	$	30.00
2	Establishment (After Hours)	$	40.00	$	40.00
3	Reconnection	$	30.00	$	30.00
4	Reconnection (After Hours)	$	40.00	$	40.00
5	Meter Test, if less than 3.00% variance	$	10.00	$	10.00
6	Deposit		**		**
7	Deposit Interest		**		**
8	Re-Establishment		30.00		30.00
9	Re-Establishment (After Hours)	$	40.00	$	40.00
10	NSF Check	$	10.00	$	10.00
11	Deferred Payment, Per Month		(a)		(a)
12	Meter Re-Read	$	5.00		5.00
13	**Charge of Moving Customer Meter -**				
14	**Customer Requested**		Cost		Cost
15	Late Payment Charge		1.50%		1.50%
16					
17	**Sprinklers**		(b)		(b)
18					
19					

20 ** PER COMMISSION RULES (R14-2-403.B), with interest rates as filed by the Company
21 or at 6.00%.
22 (a) May include a finance charge as approved by the Commission in a tariff proceeding.
23 Groundwater Withdrawal Fees shall be collected as an assessment, and is subject to annual
24 revisions as required due to changes in rates charged by the Arizona Department of Water
25 Resources ("ADWR"). Includes an allowance of 10% lost and unaccounted for water.
26 IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM
27 ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE
28 TAX. PER COMMISSION RULE (14-2-409.D 5)
29 ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,
30 AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES,
31 DEPENDING ON WHETHER THE COMPANY CHOOSES RATE BASE OR GROSS- UP TREATMENT.
32 (b) 1.00% of the monthly minimum for a comparable sized meter connection, but no less than $5 per month
33
34
35
36
37
38
39
40
41
42
43

Arizona American - Agua Fria Water Division
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Schedule H-3
Page 4
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates		
1		Service Line		Meter Installation	
2		Present	Proposed	Present	Proposed
3	Meter Size	Charges	Charges	Charges	Charges
4	5/8 x 3/4 Inch	$255	$370	$ 65	$ 130
5	3 / 4 Inch, will no longer be installed	$255	$370	$ 105	$ 205
6	1 Inch	$275	$420	$ 145	$ 240
7	1 1/2 Inch	$290	$450	$ 345	$ 450
8	2 Inch	$315	$580	$ 775	$ 1,640
9	3 Inch	Cost	$765	Cost	$ 2,195
10	4 Inch	Cost	$1,120	Cost	$ 3,145
11	6 Inch	Cost	$6,020	Cost	$ 6,120
12	8 Inch	Cost	Cost	Cost	Cost
13					
14	As meters and service lines are now taxable income for income purposes, The Company				
15	shall collect income taxes on the meter and service line charges.				
16	Any tax collected will be refunded each year that the meter deposit is refunded.				
17					
18	**Water Facililties Hook-up Fee (a)**				
19	Meter Size: Factor				
20	5/8 x 3/4 Inch 1	$ 1,150	$ 1,150		
21	3 / 4 Inch 1.5	1,725	1,725		
22	1 Inch 2.5	2,875	2,875		
23	1 1/2 Inch 5	5,750	5,750		
24	2 Inch 8	9,200	9,200		
25	3 Inch 16	18,400	18,400		
26	4 Inch 25	28,750	28,750		
27	6 Inch 50	57,500	57,500		
28	8 Inch 100	115,000	115,000		
29	**(a)** Accounted for as a Contribution in Aid of Construction				
30					
31	**Central Arizona Project Hook-up Fee**				
32	Meter Size: **ERU**				
33	5/8 x 3/4 Inch 1	$ 150	$ 150		
34	3 / 4 Inch 1.5	225	225		
35	1 Inch 2.5	375	375		
36	1 1/2 Inch 5	750	750		
37	2 Inch 8	1,200	1,200		
38	3 Inch 16	2,400	2,400		
39	4 Inch 25	3,750	3,750		
40	6 Inch 50	7,500	7,500		
41	8 Inch 100	15,000	15,000		
42	**ERU** = Equivalent Residential Unit				
43					

ANTHEM
WATER DIVISION

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Present Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-1
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and **(1)**	1,847,438	3,606	691,596	802,410	35,169	175,472	96,219	3,330	19,501	-	20,135
Revenue Annualizations	-										
(a) Miscellaneous Revenue	1,950,387	3,807	730,135	847,124	37,128	185,251	101,581	3,516	20,588	-	21,257
Total Revenues	3,797,825	7,413	1,421,731	1,649,534	72,297	360,723	197,800	6,846	40,089	-	41,392
Operating Expenses **(b)**	1,543,994	2,746	632,937	606,087	22,776	121,609	63,587	7,167	60,890	-	26,195
Depreciation and Amortization **(b)**	874,137	1,092	333,020	372,768	6,757	47,119	20,486	7,785	67,266	-	17,845
Property Tax **(c)**	173,433	339	64,925	75,328	3,302	16,473	9,033	313	1,831	-	1,890
Income Tax **(d)**	446,707	1,381	137,763	228,091	17,923	76,899	47,148	(5,171)	(52,765)	-	(4,561)
Total Operating Expenses	3,038,271	5,557	1,168,645	1,282,275	50,757	262,100	140,253	10,093	77,221	-	41,369
Operating Income	759,553	1,856	253,085	367,259	21,540	98,623	57,547	(3,248)	(37,131)	-	23
Interest Expense **(e)**	261,934	317	99,622	113,172	1,574	12,960	5,025	2,513	21,648	-	5,104
Net Income	497,619	1,539	153,464	254,087	19,965	85,663	52,522	(5,761)	(58,779)	-	(5,081)
Rate Base **(f)**	9,288,445	11,243	3,532,682	4,013,185	55,833	459,572	178,195	89,106	767,651	-	180,980
Rate of Return **(g)**	8.18%	16.50%	7.16%	9.15%	38.58%	21.46%	32.29%	-3.64%	-4.84%		

(1) Revenues are from Company's Bill Count.
(a) Miscellaneous Revenue allocated to Each Customer Class based on percent of revenues at present rates.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	944,326										
Percent of Taxable Income		0.31%	30.84%	51.06%	4.01%	17.21%	10.55%	-1.16%	-11.81%	0.00%	-1.02%
Income Tax		446,707	446,707	446,707	446,707	446,707	446,707	446,707	446,707	446,707	446,707
Allocated Income Tax		1,381	137,763	228,091	17,923	76,899	47,148	(5,171)	(52,765)	-	(4,561)
Income Tax											
Property Tax Allocation	173,433	0.20%	37.44%	43.43%	1.90%	9.50%	5.21%	0.18%	1.06%	0.00%	1.09%
Property Tax Allocation	173,433	339	64,925	75,328.27	3,301.55	16,472.91	9,032.82	312.61	1,830.73	-	1,890.24

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Proposed Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-2
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and **(1)** Revenue Annualizations	1,472,658	2,319	444,462	540,565	30,015	181,895	116,953	57,346	78,871	-	20,233
	-										
Misc. Revenue **(a)**	1,950,387	3,071	588,645	715,924	39,752	240,902	154,892	75,948	104,456	-	26,796
Total Revenues	3,423,045	5,390	1,033,107	1,256,489	69,767	422,797	271,845	133,294	183,327	-	47,029
Operating Expenses **(b)**	1,543,994	2,746	632,937	606,087	22,776	121,609	63,587	7,167	60,890	-	26,195
Depreciation and Amortization **(b)**	874,137	1,092	333,020	372,768	6,757	47,119	20,486	7,785	67,266	-	17,845
Property Tax **(c)**	173,433	273	52,344	63,662	3,535	21,422	13,773	6,754	9,289	-	2,383
Income Tax **(d)**	219,548	371	(32,695)	38,856	13,540	84,685	65,136	42,046	9,342	-	(1,734)
Total Operating Expenses	2,811,112	4,482	985,606	1,081,373	46,608	274,834	162,982	63,752	146,786	-	44,689
Operating Income	611,933	908	47,500	175,116	23,159	147,963	108,864	69,542	36,541	-	2,340
Interest Expense **(e)**	261,934	317	99,622	113,172	1,574	12,960	5,025	2,513	21,648	-	5,104
Net Income	349,999	591	(52,121)	61,944	21,585	135,003	103,838	67,029	14,893	-	(2,764)
Rate Base **(f)**	9,288,445	11,243	3,532,682	4,013,185	55,833	459,572	178,195	89,106	767,651	-	180,980
Rate of Return **(g)**	6.59%	8.08%	1.34%	4.36%	41.48%	32.20%	61.09%	78.04%	4.76%		
Percent of Total Customers		0.248%	57.325%	40.130%	0.248%	1.273%	0.248%	0.093%	0.403%	0.000%	0.031%

(1) Revenues are from ACC Staff Bill Count / Proposed Rates.
(a) Miscellaneous Revenue allocated to Each Customer Class based on percent of revenues at proposed rates.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	569,546										
Percent of Taxable Income		0%	-15%	18%	6%	39%	30%	19%	4%	0%	-1%
Income Tax		219,548	219,548	219,548	219,548	219,548	219,548	219,548	219,548	219,548	219,548
Allocated Income Tax		371	(32,695)	38,856	13,540	84,685	65,136	42,046	9,342	-	(1,734)
Percent of Revenues		0.16%	30.18%	36.71%	2.04%	12.35%	7.94%	3.89%	5.36%	0.00%	1.37%
Property Tax Allocation	173,433	273	52,344	63,662	3,535	21,422	13,773	6,754	9,289	-	2,383

Arizona American - Anthem Water
Test Year Ended December 31, 2000
Cost of Service Study Using Commodity / Demand Method
Allocation of Assets to Customer Classes Using ACC Staff Net Plant

Exhibit
Rebuttal Schedule G-3
Page 1
Witness: Kozoman

Line No.		Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
1	Plant, Minus Accumulated Depreciation, Advances and Contributions in Aid and Meter Deposits (from Schedule G-5, Page 1)											
2	Commodity	276,069	613	102,206	92,810	8,802	41,567	24,400	-	17	-	5,654
3	Demand	7,813,833	8,457	2,928,602	3,416,966	42,283	346,718	135,304	79,280	687,093	-	169,131
4	Customer	207,299	515	118,833	83,190	515	2,638	515	193	836	-	64
5	Service	384,020	879	202,979	162,109	1,077	7,171	1,857	1,012	6,439	-	495
6	Meter	607,225	780	180,062	258,109	3,157	61,478	16,118	8,621	73,265	-	5,636
7	Totals	9,288,445	11,243	3,532,682	4,013,185	55,833	459,572	178,195	89,106	767,651	-	180,980
8												
9												
10	Commodity	-	-	-	-	-	-	-	-	-	-	-
11	Demand	-	-	-	-	-	-	-	-	-	-	-
12	Customer											
13	Service											
14	Meter											
15	Totals	-	-	-	-	-	-	-	-	-	-	-
16												
17												
18				-	-	-	-	-	-	-		
19				-	-	-	-	-	-	-	-	-
20				-	-	-	-	-	-	-		
21				-	-	-	-	-	-	-	-	-
22												
23	Net Rate Base	9,288,445	11,243	3,532,682	4,013,185	55,833	459,572	178,195	89,106	767,651	-	180,980
24												
		Total ACC Staff Interest										
	Interest Expense Allocation	261,934	317	99,622	113,172	1,574	12,960	5,025	2,513	21,648	-	5,104
	Ratio of rate bases to total rate base		0.1210%	38.0331%	43.2062%	0.6011%	4.9478%	1.9185%	0.9593%	8.2646%	0.0000%	1.9484%

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Customer Classes Using ACC Staff Expenses

Exhibit
Rebuttal Schedule G-4
Page 1
Witness: Kozoman

	Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Operation and Maintenance Expense (from Schedule G-6, Page 1)											
Commodity	577,611	1,283	213,844	194,185	18,415	86,969	51,051	-	36	-	11,829
Demand	650,846	704	243,935	284,613	3,522	28,880	11,270	6,604	57,231	-	14,088
Customer	286,385	711	164,169	114,927	711	3,644	711	267	1,155	-	89
Service	10,107	23	5,342	4,266	28	189	49	27	169	-	13
Meter	19,045	24	5,648	8,096	99	1,928	506	270	2,298	-	177
Totals	1,543,994	2,746	632,937	606,087	22,776	121,609	63,587	7,167	60,890	-	26,195
Depreciaton Expense on Plant (from Schedule G-6, Page 2)											
Commodity	80,732	179	29,889	27,141	2,574	12,156	7,135	-	5	-	1,653
Demand	740,402	801	277,501	323,776	4,007	32,853	12,821	7,512	65,106	-	16,026
Customer	27,274	68	15,635	10,945	68	347	68	25	110	-	8
Service	10,199	23	5,391	4,305	29	190	49	27	171	-	13
Meter	15,529	20	4,605	6,601	81	1,572	412	220	1,874	-	144
Totals	874,137	1,092	333,020	372,768	6,757	47,119	20,486	7,785	67,266	-	17,845
Total Expenses (excluding Income Tax and Property Taxes)	2,418,131	3,838	965,957	978,855	29,533	168,728	84,072	14,952	128,155	-	44,040

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Rate Base by Function Using ACC Staff Plant and Accumulated Depreciation

Exhibit
Rebuttal Schedule G-5
Page 1
Witness: Kozoman

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Rate Base							
Plant minus (Accumulated Depreciation Contributions in Aid of Construction Advances in Aid of Construction and Meter Deposits)	9,288,445	7,813,833	276,069	207,299	607,225	384,020	9,288,445
	9,288,445	7,813,833	276,069	207,299	607,225	384,020	9,288,445

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Allocation of Property Taxes to Functions							
Revenue Requirement by Function	3,422,290	2,201,665	719,496	349,933	93,628	57,569	3,422,290
						-	-
Total Revenue Requirement	3,422,290	2,201,665	719,496	349,933	93,628	57,569	3,422,290
Property Taxes Allocation	173,433	111,575	36,462	17,734	4,745	2,917	173,433

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of
Construction and Meter Deposits Using ACC Staff Plant and Accumulated Depreciation to Functions

Exhibit
Rebuttal Schedule G-5
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accum. Depr. Adjustments. (None)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible												
301.00	Organization	-	-		-	-	-	-					-
302.00	Franchises	3,827,476	-		3,827,476	-	3,827,476	3,827,476					3,827,476
303.00	Miscellaneous Intangibles	-	-		-	-	-	-					-
Total Intangible Plant		3,827,476	-		3,827,476	-	3,827,476						-
		0											-
	Source of Supply	0											-
310.00	Land and Land Rights	5,000	-		5,000	$ -	5,000	5,000					5,000
311.00	Structures and Improvements	212,175	5,960		206,215	1,127	205,089	205,089					205,089
312.00	Collecting and Impounding Res.	370,979	13,254		357,725	3,096	354,628	354,628					354,628
313.00	Lakes, Rivers, Other Intakes	394,971	21,387		373,584	4,935	368,648	331,784	36,865				368,648
314.00	Wells and Springs	461,497	22,685		438,812	-	438,812	394,931	43,881				438,812
Total Source of Supply Plant		1,444,622	63,287		1,381,335	9,158	1,372,177						-
		0											-
	Pumping	0											-
320.00	Land and Land Rights	20,000	-		20,000	-	20,000	20,000					20,000
321.00	Structures and Improvements	2,057,878	72,766		1,985,112	17,176	1,967,936	1,771,142	196,794				1,967,936
323.00	Other Power Production	-	-		-	-	-	-	-				-
325.00	Electric Pumping Equipment	9,608,437	793,757		8,814,680	212,172	8,602,508	7,742,257	860,251				8,602,508
326.00	Diesel Pumping Equipment	-	-		-	-	-	-	-				-
328.10	Gas Engine Pumping Equipment	1,476	65		1,411	33	1,379	1,241	138				1,379
Total Pumping Plant		11,687,791	866,588		10,821,203	229,381	10,591,823						-
		0											-
	Water Treatment	0											-
330.00	Land and Land Rights	-	-		-	-	-	-					-
331.00	Structures and Improvements	634,556	5,118		629,438	5,296	624,142	561,728	62,414				624,142
332.00	Water Treatment Equipment	4,378,549	166,535		4,212,014	87,377	4,124,637	3,712,173	412,464				4,124,637
Total Water Treatment Plant		5,013,105	171,653		4,841,452	92,673	4,748,779						-
		0											-
	Transmission and Distribution	0											-
340.00	Land and Land Rights	18,469	-		18,469	-	18,469	18,469					18,469
341.00	Structures and Improvements	1,866,969	151		1,866,818	154	1,866,664	1,679,998	186,666				1,866,664
342.00	Distribution, Reservoirs, & ST	15,471,434	67,634		15,403,800	14,840	15,388,960	13,850,064	1,538,896				15,388,960
343.00	Transmission and Distribution	-	366,685		(366,685)	87,247	(453,932)	(408,539)	(45,393)				(453,932)
344.00	Fire Mains	773,445	-		773,445	-	773,445	773,445					773,445
345.00	Services	411,258	23,795		387,463	147	387,316					387,316	387,316
346.00	Meters	618,693	11,468		607,225	-	607,225				607,225		607,225
348.00	Hydrants	-	15,871		(15,871)	-	(15,871)			(15,871)			(15,871)
349.00	Other Transmission & Distribution	-	-		-	-	-	-	-				-
Total Transmission and Distribution Plant		19,160,268	485,603		18,674,665	102,389	18,572,276						

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of Construction and Meter Deposits

Exhibit
Rebuttal Schedule G-5
Page 2a
Witness: Kozoman

		ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accumulated Depr. Adj. (None)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
ALLOCATED COMMON PLANT													
Maricopa Common Plant													
389.00	Land and Land Rights	171	-		171	-	171	171					171
390.00	Structures and Improvements	117,575	10,916		106,659	924	105,735	105,735					105,735
391.00	Office Funiture and Equipment	57,875	12,656		45,219	896	44,323			44,323			44,323
391.10	Computer Equipment	81,095	(15,260)		96,355	-	96,355			96,355			96,355
392.00	Transportation Equipment	90,270	36,445		53,825	493	53,332	13,333		39,999			53,332
393.00	Stores Equipment	1,009	273		736	-	736			736			736
394.00	Tools, Shop and Garage	14,430	640		13,790	31	13,759			13,759			13,759
395.00	Laboratory Equipment	6,621	806		5,815	451	5,364			5,364			5,364
396.00	Power Operated Equipment	4,224	1,503		2,721	36	2,685	671		2,014			2,685
397.00	Communication Equipment	32,468	11,676		20,792	-	20,792	5,198		15,594			20,792
398.00	Miscellaneous Equipment	9,728	4,509		5,219	194	5,025			5,025			5,025
Total Common Plant		415,466	64,164		351,302	3,024	348,278						
													-
													-
	TOTAL WATER PLANT	41,548,728	1,651,294	-	39,897,434	436,625	39,460,808	34,965,993	3,292,975	207,299	607,225	387,316	39,460,808
Total Plant		41,548,728			39,897,434								
	Adjustments to Accumulated Depreciation												
Company's additional Accumulated Depreciation Adjustment			436,625		(436,625)								-
	Total Acumulated Depreciation		2,087,920										
	Total Net Plant				39,460,808								
	Advances in Aid of Construction				29,093,642		(29,093,642)	(26,184,278)	(2,909,364)				(29,093,642)
	Contributions in Aid of Construction				1,075,425		(1,075,425)	(967,883)	(107,543)				(1,075,425)
	Customer Meter Deposits				3,296		(3,296)					(3,296)	(3,296)
	Total Rate Base				9,288,445		9,288,445	7,813,833	276,069	207,299	607,225	384,020	9,288,445

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of ACC Staff Expenses to Functions

Exhibit
Rebuttal Schedule G-6
Page 1
Witness: Kozoman

		ACC Staff Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Salaries and Wages	(a)	372,209	260,430	28,937	73,693	9,149	-	372,209
Purchased Water		161,330		161,330				161,330
Purchased Power		264,487		264,487				264,487
Chemicals		78,285		78,285				78,285
Repairs and Maintenance	(b)	130,909	108,722	12,080	-	-	10,107	130,909
Office Supplies and Expense		15,168			15,168			15,168
Outside Services		19,830			19,830			19,830
Service Company Charges		-	-	-	-	-	-	-
Water Testing		1,193		1,193				1,193
Rents		18,568			18,568			18,568
Transportation Expenses		-			-			-
Insurance - General Liability		52,946			52,946			52,946
Insurance - Health and Life		-	-		-			-
Regulatory Commission Expense - Rate Case		26,471			26,471			26,471
Miscellaneous Expense		324,127	226,788	25,199	64,173	7,967	-	324,127
Depreciation Expense, Allocated on Rebuttal Schedule G-6, Page 2								-
Taxes Other Than Income		78,471	54,905	6,101	15,536	1,929	-	78,471
Property Taxes, Allocated on Rebuttal Schedules G-1 & G-2				-	-			-
Income Tax, Allocated on Rebuttal Schedules G-1 & G-2								
		1,543,994	650,846	577,611	286,385	19,045	10,107	1,543,994

(a) Labor (Wages and Salaries) factor computations shown on Rebuttal Schedule G-7, Page 2a
(b) Repairs and Maintenance allocation factors computation shown on Rebuttal Schedule G-7, Page 2a

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciatio Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible										-
301.00	Organization	-		-							-
302.00	Franchises	3,827,476		-							-
303.00	Miscellaneous Intangibles	-		-							-
	Subtotal Intangible	3,827,476		-							-
											-
	Source of Supply										-
310.00	Land and Land Rights	5,000		-							-
311.00	Structures and Improvements	212,175	2.500%	5,304	5,304	5,304					5,304
312.00	Collecting and Impounding Res.	370,979	2.500%	-	-	-					-
313.00	Lakes, Rivers, Other Intakes	394,971	2.500%	-	-						-
314.00	Wells and Springs	461,497	2.520%	11,630	11,630	10,467	1,163				11,630
	Subtotal Source of Supply	1,444,622		16,934							-
											-
	Pumping										-
320.00	Land and Land Rights	20,000	0.000%	-	-						-
321.00	Structures and Improvements	2,057,878	1.670%	34,367	34,367	30,930	3,437				34,367
323.00	Other Power Production	-	0.000%	-	-	-	-				-
325.00	Electric Pumping Equipment	9,608,437	4.420%	424,693	424,693	382,224	42,469				424,693
326.00	Diesel Pumping Equipment	-	4.420%	-	-	-	-				-
328.10	Gas Engine Pumping Equipment	1,476	4.420%	65	65	59	7				65
	Subtotal Pumping	11,687,791		459,125							-
											-
	Water Treatment										-
330.00	Land and Land Rights				-						-
331.00	Structures and Improvements	634,556	1.670%	10,597	10,597	9,537	1,060				10,597
332.00	Water Treatment Equipment	4,378,549	4.000%	175,142	175,142	157,628	17,514				175,142
	Subtotal Water Treatment	5,013,105		185,739							-
											-
	Transmission and Distribution										-
340.00	Land and Land Rights	18,469		-	-						-
341.00	**Structures and Improvements (a)**	######	**0.000%**	-	-	-	-				-
342.00	Distribution, Reservoirs, & ST	15,471,434	1.670%	258,373	258,373	232,536	25,837				258,373
343.00	Transmission and Distribution	-	1.530%	-	-	-	-				-
344.00	Fire Mains	773,445	0.000%	-	-						-
345.00	Services	411,258	2.480%	10,199	10,199					10,199	10,199
346.00	Meters	618,693	2.510%	15,529	15,529				15,529		15,529
348.00	Hydrants	-	2.000%	-	-			-			-
349.00	Other Transmission & Distribution	-		-	-	-	-				-
	Subtotal Transmission and Distribution	19,160,268		284,101							

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2a
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciation Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	General										
389.00	Land and Land Rights	171		-							-
390.00	Structures and Improvements	117,575	1.681%	1,976	1,976	1,976					1,976
391.00	Office Funiture and Equipment	57,875	4.545%	2,631	2,631			2,631			2,631
391.10	Computer Equipment	81,095	4.545%	3,686	3,686			3,686			3,686
392.00	Transportation Equipment	90,270	25.000%	22,568	22,568	5,642		16,926			22,568
393.00	Stores Equipment	1,009	3.921%	40	40			40			40
394.00	Tools, Shop and Garage	14,430	4.135%	597	597			597			597
395.00	Laboratory Equipment	6,621	3.710%	246	246			246			246
396.00	Power Operated Equipment	4,224	5.144%	217	217	54		163			217
397.00	Communication Equipment	32,468	10.278%	3,337	3,337	834		2,503			3,337
398.00	Miscellaneous Equipment	9,728	4.979%	484	484			484			484
	Subtotal General	415,466		35,781				-			
								-			-
											-
	Subtotals	41,548,728		981,680							-
				-							
				-							
						-					-
						-					-
					-	-					-
Less: Amotization of Contributions		1,075,425	10.00%	(107,542)	(107,542)	(96,788)	(10,754)				(107,542)
Total Depreciation Expense				874,137	874,137	740,402	80,732	27,274	15,529	10,199	874,137

(a) No ACC Staff testimony on why there is no depreciation on Structures & Improvements.

Arizona American - Anthem Water
Test Year Ended December 31, 2001
SUMMARY OF COMMODITY - DEMAND METHOD FUNCTION FACTORS

Exhibit
Rebuttal Schedule G-7
Page 1
Witness: Kozoman

Line No.	Description	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Totals
1												
2												
3	Commodity	0.222%	37.022%	33.619%	3.188%	15.057%	8.838%	0.000%	0.006%	0.000%	2.05%	100.00%
4	Demand	0.108%	37.480%	43.730%	0.541%	4.437%	1.732%	1.015%	8.793%	0.000%	2.16%	100.00%
5	Customer	0.248%	57.325%	40.130%	0.248%	1.273%	0.248%	0.093%	0.403%	0.000%	0.03%	100.00%
6	Services	0.229%	52.856%	42.214%	0.281%	1.867%	0.484%	0.264%	1.677%	0.000%	0.13%	100.00%
7	Meters	0.128%	29.653%	42.506%	0.520%	10.124%	2.654%	1.420%	12.066%	0.000%	0.93%	100.00%
8												
9												
10												
11												
12												
13												

Arizona American - Anthem Water
Test Year Ended December 31, 2001
COMMODITY - DEMAND METHOD FUNCTION FACTORS
Plant and Depreciation Expense Allocations

Exhibit
Rebuttal Schedule G-7
Page 2
Witness: Kozoman

Line No.	Description	Total	Demand	Commodity	Customer
3	Wells	1.00	0.90	0.10	
4	Pumps & Equipment	1.00	0.90	0.10	
5	Distribution Mains	1.00	0.90	0.10	
6	Customer	1.00			1.00
7	Services	1.00			1.00
8	Meters	1.00			1.00
9	Fire Hydrants	1.00			1.00
10	Transportation Equip.	1.00	0.25		0.75
11	Office Furniture	1.00			1.00
12	Communication Equip.	1.00	0.25		0.75

To Approximately Match ACC Staff Proposed Rates for 5/8 Inch Meter

Demand and Commodity Allocation to Wells, Pumps and Equipment and Distribution Mains would need to be changed to approximately match ACC Staff's proposed monthly minimums and commodity rates. The match would be ACC Staff's Proposed Rates to Computed Monthly Minimum and Commodity rate WITHOUT Equity returns and Income Taxes. Match would be based on cost only.

Required Allocations:

Description	Total	Demand	Commodity	Customer
Wells	1.00	(0.02)	1.02	
Pumps & Equipment	1.00	(0.02)	1.02	
Distribution Mains	1.00	(0.02)	1.02	

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 2a
Witness: Kozoman

Labor Allocation Factors	
Pumping Labor	77.74%
Meter Labor	2.46%
Customer Labor	19.80%
	100.00%

Repairs and Maintenance Allocation Factors	
Repairs and Maintenance Demand	13.86%
Repairs and Maintenance Pumping	75.91%
Repairs and Maintenance Mains	2.51%
Repairs and Maintenance Services	7.72%
Repairs and Maintenance Meters	0.00%
Repairs and Maintenance Customer	0.00%
	100.00%

Computations shown on this work sheet are from page labeled asTrial Balance in this work book. Allocation percentage were computed based on Expenses charged by Citizens Utilities and are then applied to proforma amounts.

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF CLASS ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 3
Witness: Kozoman

COMMODITY ALLOCATION FACTOR

Meter Size	(a) Total Gallons (in 1,000's) In Test Year	Percent of Total
5/8" x 3/4"	1,011	0.22%
3/4"	168,521	37.02%
1"	153,028	33.62%
1-1/2"	14,512	3.19%
2"	68,536	15.06%
3"	40,231	8.84%
4"	-	0.00%
6"	28	0.01%
8"	-	0.000%
10"	9,322	2.048%
Totals	455,190	100.00%

DEMAND ALLOCATION FACTOR

Meter Size	(a) Number of Meters and/or Services	Equiv-alent Weight	Equivalent Number of Meters and/or Services	Percent of Total
5/8" x 3/4	8	1.0	8	0.11%
3/4"	1,847	1.5	2,771	37.48%
1"	1,293	2.5	3,233	43.73%
1-1/2"	8	5.0	40	0.54%
2"	41	8.0	328	4.44%
3"	8	16.0	128	1.73%
4"	3	25.0	75	1.01%
6"	13	50.0	650	8.79%
8"	-	80.0	0	0.00%
10"	1	160.0	160	2.16%
Totals	3,222		7,392	100.00%

CUSTOMER ALLOCATION FACTOR

Meter Size	Number of Meters	Percent of Total
5/8" x 3/4"	8	0.25%
3/4"	1,847	57.32%
1"	1,293	40.13%
1-1/2"	8	0.25%
2"	41	1.27%
3"	8	0.25%
4"	3	0.09%
6"	13	0.40%
8"	0	0.00%
10"	1	0.03%
Totals	3,222	100.00%

SERVICES ALLOCATION FACTOR (b)

Meter Size	Number of Services	Install-ation Cost	Weighted Number Services	Percent of Total
5/8" x 3/4	8	$ 355.00	2,840	0.23%
3/4"	1,847	355.00	655,685	52.86%
1"	1,293	405.00	523,665	42.21%
1-1/2"	8	435.00	3,480	0.28%
2"	41	565.00	23,165	1.87%
3"	8	750.00	6,000	0.48%
4"	3	1,090.00	3,270	0.26%
6"	13	1,600.00	20,800	1.68%
8"	0	1,600.00	0	0.00%
10"	1	1,600.00	1,600	0.13%
Totals	3,222		1,240,505	100.00%

METER ALLOCATION FACTOR (b)

Meter Size	Number of Meters	Meter Cost	Weighted Dollars of Meters	Percent of Total
5/8" x 3/4"	8	$ 105.00	840	0.13%
3/4"	1,847	105.00	193,935	29.65%
1"	1,293	215.00	277,995	42.51%
1-1/2"	8	425.00	3,400	0.52%
2"	41	1,615.00	66,215	10.12%
3"	8	2,170.00	17,360	2.65%
4"	3	3,095.00	9,285	1.42%
6"	13	6,070.00	78,910	12.07%
8"	0	6,070.00	0	0.00%
10"	1	6,070.00	6,070	0.93%
Totals	3,222		654,010	100.00%

(a) Includes customer and gallon sold annualization

(b) Meter and Service Line cost from Arizona Corporation Commission Memo of April 23, 2002 from Marlin Scott, Jr.. Meter costs based on compound meters. Cost of service line and

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Including Debt, Equity, and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	207,299	384,020	607,225	1,198,544
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	5,846	10,829	17,124	33,799
4	Rate Bases	207,299	384,020	607,225	1,198,544
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	7,794	14,439	22,832	45,065
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	12,694	23,516	37,184	73,395
9					
10	Revenue Requirement for Debt Component, from Line 3	5,846	10,829	17,124	33,799
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	12,694	23,516	37,184	73,395
13	Total Return Requirement with Income Tax	18,540	34,345	54,308	107,194
14					
15	Property Tax Expense, from Schedule G-5, Page 1	17,734	2,917	4,745	25,396
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	286,385	10,107	19,045	315,537
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	27,274	10,199	15,529	53,002
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	349,933	57,569	93,628	501,129
19					
20	**Customer Charge**				
21	Number of Bills = 3,222 times 12 Months	38,664			
22					
23	**Charge per Bill**	$ 9.05			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Inch Meters 7,392 times 12		88,704	88,704	
28					
29	**Charge per Equivalent 5/8 x 3/4 Inch Meter**		$ 0.65	$ 1.06	
30					
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 Inch Meter (with no water included in Minimum or Demand Charge)				
34	Charge per Bill (Customer Charge with Equity Return and Income Tax)	$ 9.05			
35	Charge per Equivalent Meter (For Service Line Charge with Equity Return and Income Tax)	0.65			
36	Charge per Equivalent Meter (For Meter Charge with Equity Return and Income Tax)	1.06			
37	(Service and Meter Revenue Requirement divided by Annualized Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter	$ 10.76			
39					

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Excluding Equity Return, and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1a
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	207,299	384,020	607,225	1,198,544
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	5,846	10,829	17,124	33,799
4	Rate Bases	207,299	384,020	607,225	1,198,544
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	0.00%	0.00%	0.00%	0.00%
6	Required Operating Income for Equity	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-
9					
10	Revenue Requirement for Debt Component, from Line 3	5,846	10,829	17,124	33,799
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	-	-	-	-
13	Total Return Requirement with Income Tax	5,846	10,829	17,124	33,799
14					
15	Property Tax Expense, from Schedule G-5, Page 1	17,734	2,917	4,745	25,396
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	286,385	10,107	19,045	315,537
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	27,274	10,199	15,529	53,002
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	337,238	34,053	56,443	427,734
19					
20	**Customer Charge**				
21	Number of Bills = 3,222 times 12	38,664			
22					
23	**Charge per Bill**	$ 8.72			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Inch Meters 7,392 times 12		88,704	88,704	
28					
29	**Charge per Equivalent 5/8 x 3/4 Inch Meter**		$ 0.38	$ 0.64	
30	**Actual Cost (without Equity Returns or Income Taxes)**				
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 Inch Meter (with no water included in Minimum or Demand Charge, nor recovery of equity return or income tax)				
34	Charge per Bill (Customer Charge without Equity Return or Income Tax)	$ 8.72			
35	Charge per Equivalent Meter (For Service Line Charge without Equity Return or Income Tax)	0.38			
36	Charge per Equivalent Meter (For Meter Charge without Equity Return or Income Tax)	0.64			
37	(Service and Meter Revenue Requirement divided by Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter without recovery of Equity Return or Income Tax	$ 9.74			

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Including Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	7,813,833
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	220,350
5	Rate Base	7,813,833
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%
7	Required Operating Income for Equity	293,800
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	478,492
10		
11	Revenue Requirement for Debt Component, from Line 4	220,350
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	478,492
14		
15	Property Tax Expense, from Schedule G-5, Page 1	111,575
16	Demand Expenses, from Schedule G-6, Page 1	650,846
17	Depreciation, from Schedule G-6, Page 2	740,402
18	Totals	2,201,665
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Inch Meters	88,704
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 24.82
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 24.82	1.0	$ 24.82
26	3/4 Inch Meter	$ 24.82	1.5	37.23
27	1 Inch Meter	$ 24.82	2.5	62.05
28	1 1/2 Inch Meter	$ 24.82	5.0	124.10
29	2 Inch Meter	$ 24.82	8.0	198.56
30	3 Inch Meter	$ 24.82	16.0	397.13
31	4 Inch Meter	$ 24.82	25.0	620.51
32	6 Inch Meter	$ 24.82	50.0	1,241.02
33	8 Inch Meter	$ 24.82	80.0	1,985.63
34	10 Inch Meter	$ 24.82	160.0	3,971.26

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Excluding Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2a
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	7,813,833
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	220,350
5	Rate Base	7,813,833
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	
7	Required Operating Income for Equity	-
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	-
10		
11	Revenue Requirement for Debt Component, from Line 4	220,350
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	-
14		
15	Property Tax Expense, from Schedule G-5, Page 1	111,575
16	Demand Expenses, from Schedule G-6, Page 1	650,846
17	Depreciation, from Schedule G-6, Page 2	740,402
18	Totals	1,723,173
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Inch Meters	88,704
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 19.43
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 19.43	1.0	$ 19.43
26	3/4 Inch Meter	$ 19.43	1.5	29.14
27	1 Inch Meter	$ 19.43	2.5	48.57
28	1 1/2 Inch Meter	$ 19.43	5.0	97.13
29	2 Inch Meter	$ 19.43	8.0	155.41
30	3 Inch Meter	$ 19.43	16.0	310.82
31	4 Inch Meter	$ 19.43	25.0	485.65
32	6 Inch Meter	$ 19.43	50.0	971.31
33	8 Inch Meter	$ 19.43	80.0	1,554.09
34	10 Inch Meter	$ 19.43	160.0	3,108.18

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including and Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 3
Witness: Kozoman

Including Equity Return and Income Taxes

Line No.		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended Monthly Minimum to Computed Minimum
1	5/8 x 3/4 Inch Meter	$ 9.05	$ 0.65	$ 1.06	$ 24.82	$ 35.58	$ 11.45	32.18%
2	3/4 Inch Meter	9.05	0.97	1.58	37.23	48.84	$ 11.45	23.44%
3	1 Inch Meter	9.05	1.62	2.64	62.05	75.36	$ 22.91	30.40%
4	1 1/2 Inch Meter	9.05	3.24	5.28	124.10	141.67	$ 45.81	32.33%
5	2 Inch Meter	9.05	5.19	8.44	198.56	221.25	$ 57.27	25.88%
6	3 Inch Meter	9.05	10.38	16.89	397.13	433.45	$ 114.54	26.43%
7	4 Inch Meter	9.05	16.22	26.39	620.51	672.17	$ 143.17	21.30%
8	6 Inch Meter	9.05	32.45	52.78	1,241.02	1,335.29	$ 178.96	13.40%
9	8 Inch Meter	9.05	51.92	126.66	1,985.63	2,173.26	$ 1,070.91	49.28%
10	10 Inch Meter	9.05	155.76	422.20	3,971.26	4,558.27		
11								
12								
13	Excluding Equity Return and Income Taxes							
14								
15								
16								
17								
18								
19								
20								
21								
22		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended Monthly Minimum to Computed Minimum
23	5/8 x 3/4 Inch Meter	$ 8.72	$ 0.38	$ 0.64	$ 19.43	$ 29.17	$ 11.45	39.25%
24	3/4 Inch Meter	8.72	0.58	0.95	29.14	39.39	$ 11.45	29.07%
25	1 Inch Meter	8.72	0.96	1.59	48.57	59.84	$ 22.91	38.29%
26	1 1/2 Inch Meter	8.72	1.92	3.18	97.13	110.95	$ 45.81	41.29%
27	2 Inch Meter	8.72	3.07	5.09	155.41	172.29	$ 57.27	33.24%
28	3 Inch Meter	8.72	6.14	10.18	310.82	335.86	$ 114.54	34.10%
29	4 Inch Meter	8.72	9.60	15.91	485.65	519.88	$ 143.17	27.54%
30	6 Inch Meter	8.72	19.19	31.82	971.31	1,031.04	$ 178.96	17.36%
31	8 Inch Meter	8.72	30.71	50.90	1,554.09	1,644.43	$ 1,070.91	65.12%

32	10 Inch Meter	8.72	61.42	101.81	3,108.18	3,280.13
33						

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses and Return

Exhibit
Schedule G-8
Page 4
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	276,069	207,299	384,020	607,225	7,813,833	9,288,445
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.820%	2.820%	2.820%	2.820%	2.820%	2.820%
3	Required Operating Income - for Debt	7,785	5,846	10,829	17,124	220,350	261,934
4	Rate Bases from Schedule G-5, Page 1	276,069	207,299	384,020	607,225	7,813,833	9,288,445
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	10,380	7,794	14,439	22,832	293,800	349,246
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	16,905	12,694	23,516	37,184	478,492	568,792
9							
10	Revenue Requirement for Debt Component, from Line 3	7,785	5,846	10,829	17,124	220,350	261,934
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	16,905	12,694	23,516	37,184	478,492	568,792
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	24,691	18,540	34,345	54,308	698,842	830,726
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	36,462	17,734	2,917	4,745	111,575	173,433
16	Expenses (From Sch. G-6. Page 1)	577,611	286,385	10,107	19,045	650,846	1,543,994
17	Depreciation and Amortization (From Schedule G-6, Page 2)	80,732	27,274	10,199	15,529	740,402	874,137
18	Total Revenue Requirement by function	719,496	349,933	57,569	93,628	2,201,665	3,422,290
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	455,190	38,664	88,704	88,704	88,704	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 1.5806					
22	(Line 18 divided by Line 20)		$ 9.05	$ 0.65	$ 1.06	$ 24.82	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 35.58	
24							

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **without** Equity Return or Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 1
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4a	$ 1.5435
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	$ 19.43
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	8.72
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	0.38
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	0.64
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4a	$ 29.17

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 11.45
Proposed Commodity Rate			
0	to	4,000	$ 0.88
4,001	to	100,000	$ 1.32
Over 100,001			$ 1.57

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4)
	Computed Costs, without Equity Return or Income Taxes									Recovery of Expenses or,
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service	Usage Level When	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	(Lack of Recovery)
22	-	$ 29.17	-	$ 29.17	Revenues	-	$ 11.45		$ 11.45	$ (17.72)
23	1,000	$ 29.17	$ 1.5435	$ 30.71	Equal	1,000	11.45	$ 0.88	12.33	(18.38)
24	2,000	29.17	3.09	32.26	Expenses	2,000	11.45	1.76	13.21	(19.05)
25	3,000	29.17	4.63	33.80	Can Not	3,000	11.45	2.64	14.09	(19.71)
26	4,000	29.17	6.17	35.34	be	4,000	11.45	3.52	14.97	(20.37)
27	5,000	29.17	7.72	36.89	Achieved	5,000	11.45	4.84	16.29	(20.60)
28	6,000	29.17	9.26	38.43		6,000	11.45	6.16	17.61	(20.82)
29	7,000	29.17	10.80	39.97	As	7,000	11.45	7.48	18.93	(21.04)
30	8,000	29.17	12.35	41.52	Proposed	8,000	11.45	8.80	20.25	(21.27)
31	9,000	29.17	13.89	43.06	Commodity	9,000	11.45	10.12	21.57	(21.49)
32	10,000	29.17	15.44	44.60	Rates &	10,000	11.45	11.44	22.89	(21.71)
33	11,000	29.17	16.98	46.15	Proposed	11,000	11.45	12.76	24.21	(21.94)
34	12,000	29.17	18.52	47.69	Monthly	12,000	11.45	14.08	25.53	(22.16)
35	13,000	29.17	20.07	49.23	Minimum	13,000	11.45	15.40	26.85	(22.38)
36	14,000	29.17	21.61	50.78	Rates	14,000	11.45	16.72	28.17	(22.61)
37	15,000	29.17	23.15	52.32	are Below	15,000	11.45	18.04	29.49	(22.83)
38	16,000	29.17	24.70	53.86	Actual	16,000	11.45	19.36	30.81	(23.05)
39	17,000	29.17	26.24	55.41	Cost to	17,000	11.45	20.68	32.13	(23.28)
40	18,000	29.17	27.78	56.95	Service	18,000	11.45	22.00	33.45	(23.50)
41	19,000	29.17	29.33	58.50		19,000	11.45	23.32	34.77	(23.73)
42	20,000	29.17	30.87	60.04		20,000	11.45	24.64	36.09	(23.95)
43	25,000	29.17	38.59	67.76	Computed	25,000	11.45	31.24	42.69	(25.07)
44	30,000	29.17	46.31	75.47	Cost of	30,000	11.45	37.84	49.29	(26.18)
45	35,000	29.17	54.02	83.19	Service	35,000	11.45	44.44	55.89	(27.30)
46	40,000	29.17	61.74	90.91	Rates	40,000	11.45	51.04	62.49	(28.42)
47	45,000	29.17	69.46	98.63	Do Not	45,000	11.45	57.64	69.09	(29.54)
48	50,000	29.17	77.18	106.34	Include	50,000	11.45	64.24	75.69	(30.65)
49	55,000	29.17	84.89	114.06	Rate	55,000	11.45	70.84	82.29	(31.77)
50	60,000	29.17	92.61	121.78	of Return	60,000	11.45	77.44	88.89	(32.89)
51	65,000	29.17	100.33	129.50	on Equity	65,000	11.45	84.04	95.49	(34.01)
52	70,000	29.17	108.05	137.21	or Income	70,000	11.45	90.64	102.09	(35.12)
53	150,000	29.17	231.53	260.70	Taxes	150,000	11.45	215.02	226.47	(34.23)
54	**Average Usage**					**Average Usage**				
55	10,212	29.17	15.76	44.93		10,212	11.45	11.72	23.17	**(21.76)**

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **with** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 2
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4	$ 1.5806
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	$ 24.82
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	9.05
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	1.06
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	0.65
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4	$ 35.58

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 11.45
Proposed Commodity Rate			
0	to	4,000	$ 0.88
4,001	to	100,000	$ 1.32
Over 100,001			$ 1.57

Computed Costs, with Equity Return and Income Taxes

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4) Recovery of Expenses Rate of Return & Tax or (Lack of Recovery)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service	Usage Level When Revenues Equals Expenses and Return cannot be Achieved As Proposed Commodity Rates & Proposed Monthly Minimum Rates are Below Actual Cost to Service Computed Cost of Service Rates Includes Rate of Return on Equity and Income Taxes	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	
	-	$ 35.58	-	$ 35.58		-	$ 11.45		$ 11.45	$ (24.13)
	1,000	$ 35.58	$ 1.5806	$ 37.16		1,000	11.45	$ 0.88	12.33	(24.83)
	2,000	35.58	3.16	38.74		2,000	11.45	1.76	13.21	(25.53)
	3,000	35.58	4.74	40.32		3,000	11.45	2.64	14.09	(26.23)
	4,000	35.58	6.32	41.90		4,000	11.45	3.52	14.97	(26.93)
	5,000	35.58	7.90	43.48		5,000	11.45	4.84	16.29	(27.19)
	6,000	35.58	9.48	45.06		6,000	11.45	6.16	17.61	(27.45)
	7,000	35.58	11.06	46.64		7,000	11.45	7.48	18.93	(27.71)
	8,000	35.58	12.65	48.22		8,000	11.45	8.80	20.25	(27.97)
	9,000	35.58	14.23	49.80		9,000	11.45	10.12	21.57	(28.23)
	10,000	35.58	15.81	51.38		10,000	11.45	11.44	22.89	(28.49)
	11,000	35.58	17.39	52.96		11,000	11.45	12.76	24.21	(28.75)
	12,000	35.58	18.97	54.54		12,000	11.45	14.08	25.53	(29.01)
	13,000	35.58	20.55	56.12		13,000	11.45	15.40	26.85	(29.27)
	14,000	35.58	22.13	57.70		14,000	11.45	16.72	28.17	(29.53)
	15,000	35.58	23.71	59.29		15,000	11.45	18.04	29.49	(29.80)
	16,000	35.58	25.29	60.87		16,000	11.45	19.36	30.81	(30.06)
	17,000	35.58	26.87	62.45		17,000	11.45	20.68	32.13	(30.32)
	20,000	35.58	31.61	67.19		20,000	11.45	24.64	36.09	(31.10)
	25,000	35.58	39.52	75.09		25,000	11.45	31.24	42.69	(32.40)
	30,000	35.58	47.42	82.99		30,000	11.45	37.84	49.29	(33.70)
	35,000	35.58	55.32	90.90		35,000	11.45	44.44	55.89	(35.01)
	40,000	35.58	63.23	98.80		40,000	11.45	51.04	62.49	(36.31)
	45,000	35.58	71.13	106.70		45,000	11.45	57.64	69.09	(37.61)
	50,000	35.58	79.03	114.61		50,000	11.45	64.24	75.69	(38.92)
	55,000	35.58	86.94	122.51		55,000	11.45	70.84	82.29	(40.22)
	60,000	35.58	94.84	130.41		60,000	11.45	77.44	88.89	(41.52)
	65,000	35.58	102.74	138.32		65,000	11.45	84.04	95.49	(42.83)
	70,000	35.58	110.65	146.22		70,000	11.45	90.64	102.09	(44.13)
	150,000	35.58	237.10	272.67		150,000	11.45	215.02	226.47	(46.20)
	Average Usage					**Average Usage**				
	10,212	$ 35.58	$ 16.142	$ 51.72		10,212	11.45	11.72	23.17	**(28.55)**

Arizona American - Anthem Water
(Formerly Known as Citizens Water Services / Water)
Summary of Revenues by Customer Classification - Present and Proposed Rates
With Annualized Revenues to Year End Number of Customers
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Meter Size	Customer Classification	Adjusted Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8 Inch	Residential	$ 3,606	$ 3,645	$ 39	1.07%	0.09%	0.10%
2	3/4 Inch	Residential	620,738	627,283	6,545	1.05%	16.29%	16.39%
3	1 Inch	Residential	650,122	656,761	6,639	1.02%	17.07%	17.16%
4	1.5 Inch	Residential	2,834	2,862	28	0.98%	0.07%	0.07%
5	2 Inch	Residential	65,116	65,851	735	1.13%	1.71%	1.72%
6	3 Inch	Residential	-	-	-			
7	4 Inch	Residential		-	-			
8	3/4 Inch	Commercial	2,064	2,085	21	1.01%	0.05%	0.05%
9	1 Inch	Commercial	50,820	51,402	582	1.14%	1.33%	1.34%
10	1.5 Inch	Commercial	19,528	19,752	224	1.15%	0.51%	0.52%
11	2 Inch	Commercial	100,690	101,817	1,127	1.12%	2.64%	2.66%
12	3 Inch	Commercial	63,160	63,888	728	1.15%	1.66%	1.67%
13	2 Inch	Wholesale	-	-	-			
14	3 Inch	Wholesale	11,915	11,915	-	0.00%	0.31%	0.31%
15	6 Inch	Wholesale	56	56	-	0.00%	0.00%	0.00%
16	10 Inch	Wholesale	18,457	18,457	-	0.00%	0.48%	0.48%
17	4 Inch	Fire Protection	3,330	3,369	39	1.18%	0.09%	0.09%
18	6 Inch	Fire Protection	19,845	20,079	234	1.18%	0.52%	0.52%
19	Miscellaneous Revenues		1,950,387	1,950,387	-	0.00%	51.20%	50.97%
20	Citizens Water Resouces (Treatco)		226,872	226,872	-	0.00%	5.96%	5.93%
21	**Subtotal Water Revenues**		$3,809,540	$3,826,480	$ 16,940	0.44%	100.00%	100.00%
22								
23								
24							Additional Bills	Additional Gallons in 1,000's
25	**Revenue Annualization**							
26	Citizens Water Resouces (Treatco)		$ (18,289)	$ (18,289)	$ -	0.00%	(8)	(29,498)
27	3/4 Inch	Residential	67,152	67,853	701	1.04%	2,306	15,163
28	1 Inch	Residential	98,822	99,823	1,001	1.01%	2,102	15,859
29	2 Inch	Residential	(3,894)	(3,937)	(43)	1.12%	(12)	(1,467)
30	3/4 Inch	Commercial	1,642	1,659	17	1.02%	68	277
31	1 Inch	Commercial	2,646	2,672	27	1.01%	59	379
32	1.5 Inch	Commercial	12,807	12,953	146	1.14%	27	5,539
33	2 Inch	Commercial	13,560	13,712	152	1.12%	40	5,180
34	3 Inch	Commercial	(24,131)	(24,409)	(278)	1.15%	(40)	(8,865)
35	3 Inch	Wholesale	45,275	45,275	-	0.00%	19	20,961
36	6 Inch	Wholesale	5	5	-	0.00%	1	2
37	10 Inch	Wholesale	1,678	1,678	-	0.00%	1	777
38	6 Inch	Fire Protection	(405)	(410)	(5)	1.18%	(3)	
39	Total Revenues Annualziations		$ 196,868	$ 198,586	$ 1,718	0.87%		
40	**Total Water Revenues with**							
41	**Revenue Annualizaiton**		$4,006,408	$4,025,066	$ 18,658	0.47%	4,560	24,306
42								
43								
44								
45								
46								
47								

48 **(A)** Customer Growth Annualization is calculated by computing the change in the number of customers by month from the
49 beginning of the year t the end of the year, and then multipling the additional customers times the average revenue for
50 that month.

Arizona American - Anthem Water
(Formerly Known as Citizens Water Services / Water)
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.		Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	8	10,212	$ 36.42	$ 36.81	0.39	1.07%
2	3/4 Inch	Residential	1,642	7,753	31.51	31.84	0.33	1.05%
3	1 Inch	Residential	1,096	8,719	49.44	49.94	0.50	1.02%
4	1.5 Inch	Residential	3	7,361	78.72	79.50	0.77	0.98%
5	2 Inch	Residential	13	168,705	417.41	422.12	4.71	1.13%
6	3 Inch	Residential						
7	4 Inch	Residential						
8								
9	3/4 Inch	Commercial	7	3,727	23.45	23.69	0.24	1.01%
10	1 Inch	Commercial	17	107,951	247.90	250.74	2.84	1.14%
11	1.5 Inch	Commercial	3	263,879	591.76	598.56	6.80	1.15%
12	2 Inch	Commercial	25	130,084	340.17	343.98	3.81	1.12%
13	3 Inch	Commercial	9	201,964	563.93	570.42	6.50	1.15%
14								
15								
16	2 Inch	Wholesale						
17	3 Inch	Wholesale	0	1,103,200	2,382.91	2,382.91	-	0.00%
18	6 Inch	Wholesale	1	2,364	5.11	5.11	-	0.00%
19	10 Inch	Wholesale	1	776,818	1,677.93	1,677.93	-	0.00%
20								
21	4 Inch	Fire Protection	3	-	90.00	91.06	1.06	1.18%
22	6 Inch	Fire Protection	12	-	135.00	136.59	1.59	1.18%
23								
24								
25								
26								
27		Totals	2,841					
28								
29		Actuall Year End Number						
30		of Customers:	3,222					
31								
32		**(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.						

Arizona American - Anthem Water
(Formerly Known as Citizens Water Services / Water)
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size	Present Rates	Proposed Rates	Percent Change
1	Percentage Increase in Monthly Minimums			
2	Percentage Increase in Commodity Rates			
3				
4	**Monthly Usage Charge for:**			
5	Residential,Commercial			
6	5/8 x 3/4 Inch (a)	$ 16.00	$ 16.15	0.94%
7	3/4 Inch (a)	16.00	16.15	0.94%
8	1 Inch (a)	32.00	32.30	0.94%
9	1 1/2 Inch (a)	64.00	64.60	0.94%
10	2 Inch	80.00	80.75	0.94%
11	3 Inch	160.00	161.75	1.09%
12	4 Inch	200.00	202.35	1.17%
13	6 Inch	250.00	252.94	1.18%
14	8 Inch	-	1,295.20	0.00%
15	Private Fire Protection (Flat Rates)			
16	3 Inch	70.00	70.82	1.17%
17	4 Inch	90.00	91.06	1.18%
18	6 Inch (a)	135.00	136.59	1.18%
19	8 Inch	180.00	182.11	1.17%
20	10 Inch	360.00	364.23	1.18%
21				
22	Wholesale	-	-	0.00%
23				
24				
25	Gallons In Minimum			
26	All	-	-	
27				
28				
29				
30				
31	**Tier 1:** Gallons upper limit			
32	All, except wholesale	999,999,999	999,999,999	
33	Wholesale	999,999,999	999,999,999	
34				
35				
36	(a) Rounded to nearest whole cent			
37				
38				
39				
40				

Arizona American - Anthem Water
(Formerly Known as Citizens Water Services / Water)
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1					
2					
3	**Tier 2:** (Gallon upper limit, up to, but not exceeding)				
4	All, except wholesale		999,999,999	999,999,999	
5	Wholesale		999,999,999	999,999,999	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15	**Tier 3:** (Gallon over)				
16	All, except wholesale		999,999,999	999,999,999	
17	Wholesale		999,999,999	999,999,999	
18					
19					
20					
21					
22					
23					
24					
25					
26					
27	Commodity Rates (per 1,000 gallons over minimum and per Tier)				
28	All, except wholesale	Tier 1	$ 2.00	$ 2.02	1.17%
29	All, except wholesale	Tier 2	2.00	2.02	1.17%
30	All, except wholesale	Tier 3	2.00	2.02	1.17%
31	All, except wholesale	Tier 4		2.02	
32					
33					
34					
35	Wholesale		$ 2.16	2.16	0.00%
36	Contract Rate				
37	(a) Rounded to nearest whole cent				
38					

Arizona American - Anthem Water
(Formerly Known as Citizens Water Services / Water)
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates
1	Establishment	$ 60.00	$ 60.00
2	Establishment (After Hours)	$ 90.00	$ 90.00
3	Reconnection (Deliquent)	$ 30.00	$ 40.00
4	Reconnection (After Hours)	$ 45.00	$ 55.00
5	Meter Test	$ 30.00	$ 30.00
6	Deposit	**	**
7	Deposit Interest	**	**
8	Re-Establishment (With-in 12 Months)	***	***
9			
10	NSF Check	$ 20.00	$ 20.00
11	Deferred Payment, Per Month (b)	1.50%	1.50%
12	Meter Re-Read	$ 10.00	10.00
13	Charge of Moving Customer Meter -		
14	Customer Requested	Cost	Cost
15	Late Payment Charge, greater of 1.50% or	1.50%	1.50%
16	Damages to Meter Locks, Valves, Seals	Cost	Cost
17	Sprinklers		
18			
19			

20 ** PER COMMISSION RULES (R14-2-403.B)
21 *** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)
22 IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM
23 ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE
24 TAX. PER COMMISSION RULE (14-2-409.D 5)
25 ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,
26 AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.
27 (a) 1.00% of the monthly minimum for a comparable sized meter connection, but no less than $5 per month
28
29

	Meter Size	Present Charges	Proposed Charges
32	5/8 x 3/4 Inch	$320	$500
33	3 / 4 Inch	$320	$575
34	1 Inch	$420	$660
35	1 1/2 Inch	$635	$900
36	2 Inch	$1,090	$1,525
37	3 Inch	Cost	Cost
38	4 Inch	Cost	Cost
39	6 Inch	Cost	Cost
40	8 Inch	Cost	Cost

41
42 As meters and service lines are now taxable income for income purposes, The Company
43 shall collect income taxes on the meter and service line charges.
44 Any tax collected will be refunded each year that the meter deposit is refunded.

ANTHEM/ AGUA FRIA
WASTEWATER DIVISION

Arizona American - Anthem / Agua Fria Wastewater
(Formerly Citizens Water Services / Wastewater)
Summary of Revenues by Customer Classification - Present and Proposed Rates
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	Adjusted Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	Residential	650,824	897,893	247,069	37.96%	38.76%	46.33%
2	Small Commercial 5/8 Inch Meter	1,501	2,071	570	37.95%	0.09%	0.11%
3	Small Commercial 3/4 Inch Meter	-	-	-			
4	Small Commercial 1 Inch Meter	-	-	-			
5	Large Commercial	29,477	40,667	11,190	37.96%	1.76%	2.10%
6	Revenues from Treatco excluding Annualization	11,231	11,231	-	0.00%		
7	Miscellaneous Revenues	986,072	986,072	-	0.00%	58.73%	50.88%
8	**Subtotal of Revenues**	$1,679,105	$1,937,934	$ 258,829	15.41%	100.00%	100.00%
9							
10							
11						Additional Billings	Additional Gallons In 1,000's
12	**Revenue Annualization**						
13	Treatco Revenue Annualization	13,480	13,480	-	0.00%	14	5,810
14	Residential	167,515	231,113	63,598	37.97%	5,758	10,354
15	Small Commercial 5/8 Inch Meter	(841)	(1,160)	(319)	37.96%	(30)	(0.21)
16	Small Commercial 3/4 Inch Meter						
17	Small Commercial 1 Inch Meter						
18	Large Commercial	3,930	5,422	1,492	37.96%	21	0.27
19	Total Revenue Annualization	184,083	248,853	64,771	35.19%		
20	Total Revenues with Revenue Annualization	1,863,188	2,186,787	323,599	17.37%	5,763	16,164
21							

Arizona American - Anthem / Agua Fria Wastewater
(Formerly Citizens Water Services / Wastewater)
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Usage	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	Residential	2,033	8,854	30.00	41.39	11.39	37.97%
2	Small Commercial 5/8 Inch Meter	7	8,205	32.41	44.72	12.31	37.97%
3	Small Commercial 3/4 Inch Meter	-		-	-	-	0.00%
4	Small Commercial 1 Inch Meter	-		-	-	-	0.00%
5	Large Commercial	13	60,695	185.39	255.77	70.38	37.96%

Arizona American - Anthem / Agua Fria Wastewater
(Formerly Citizens Water Services / Wastewater)
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size	Present Rates	Proposed Rates	Percent Change
1				
2				
3				
4	**Monthly Usage Charge for:**			
5	Residential and Commercial			
6	Residential	$ 16.00	$ 22.07	37.94%
7	Small Commercial 5/8 Inch Meter	16.00	$ 22.07	37.94%
8	Small Commercial 3/4 Inch Meter	24.00	$ 33.10	37.92%
9	Small Commercial 1 Inch Meter	32.00	$ 44.15	37.97%
10	Large Commercial	64.00	$ 88.25	37.89%
11				
12				
13	In Addition to the above charges, customers will also pay for commodity treated, which is listed below.			
14	There are no commodity charges, once the gallons listed below is discharged.			
15				
16				
17	Usage (per 1,000 gallons, up to)			
18	Residential	7,000	7,000	
19	Small Commercial 5/8 Inch Meter	10,000	10,000	
20	Small Commercial 3/4 Inch Meter	15,000	15,000	
21	Small Commercial 1 Inch Meter	25,000	25,000	
22	Large Commercial	999,999,999	999,999,999	
23				
24				
25	Usage Rates (per 1,000 gallons up to limit)			
26	Residential	$ 2.00	$ 2.76	38.00%
27	Small Commercial 5/8 Inch Meter	2.00	2.76	38.00%
28	Small Commercial 3/4 Inch Meter	2.00	2.76	38.00%
29	Small Commercial 1 Inch Meter	2.00	2.76	38.00%
30	Large Commercial	2.00	2.76	38.00%
31				
32	**Capacity Reservation Charge**	$ 765.00	$ 765.00	
33	(a) Rounded to nearest whole cent			
34	**Annual Fee for Industrial Discharge Service**			
35	For those customers consuming an amount of water less than or equal			
36	50,000 gallons per month through one or more water meters to the			
37	same facility, inclusive of meters used for irrigation:	$ 500.00	$ 500.00	
38				
39				
40	For those customers consuming an amount of water greater than			
41	50,000 gallons per month through one or more water meters to the			
42	same facility, inclusive of meters used for irrigation:	$ 1,000.00	$ 1,000.00	
43				
44	Annual Fee for Industrial Discharge Service charges shall be non-refundable and shall be assessed			
45	in advance each January by the Company by special billing. For new customers receiving this service,			
46	a prorated charge shall be assessed.			

Arizona American - Anthem / Agua Fria Wastewater Exhibit
(Formerly Citizens Water Services / Wastewater) Rebuttal Schedule H-3
Changes in Representative Rate Schedules Page 2
Test Year Ended December 31, 2001 Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates
1	Establishment	$ 30.00	$ 30.00
2	Establishment (After Hours)	$ 45.00	$ 45.00
3	Reconnection (Deliquent)	$ 30.00	$ 40.00
4	Reconnection (After Hours)	$ 45.00	$ 55.00
5			
6	Deposit	**	**
7	Deposit Interest	**	**
8	Re-Establishment (With-in 12 Months)	***	***
9			
10	NSF Check	$ 15.00	$ 15.00
11	Deferred Payment, Per Month (b)	1.50%	1.50%
12			
13			
14			
15	Late Payment Charge	1.50%	1.50%
16			
17			
18			
19			

20 ** PER COMMISSION RULES (R14-2-403.B)
21 *** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)
22 IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM
23 ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE
24 TAX. PER COMMISSION RULE (14-2-409.D 5)
25 ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,
26 AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.
27 (a) 1.00% of the monthly minimum for a comparable sized meter connection, but no less than $5 per month
28
29 **Annual Fee for Industrial Discharge Service**

30	For those customers consuming an amount of water less than or equal		
31	50,000 gallons per month through one or more water meters to the		
32	same facility, inclusive of meters used for irr	$ 500.00	$ 500.00
33			
34			
35	For those customers consuming an amount of water greater than		
36	50,000 gallons per month through one or more water meters to the		
37	same facility, inclusive of meters used for irr	$ 1,000.00	$ 1,000.00

38
39 Annual Fee for Industrial Discharge Service charges shall be non-refundable and shall be assessed
40 in advance each January by the Company by special billing. For new customers receiving this service,
41 a prorated charge shall be assessed.
42
43
44

HAVASU
WATER DIVISION

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Present Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-1
Page 1
Witness: Kozoman

Change difference between G/L & Bill Count Revenues

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and Revenue Annualizations	424,081	278,124		19,904		33,343	25,194	67,516			-
Difference Between Bill count and G/L Revenues **(a)**	6,311	6,311									
Misc. Revenue **(a)**	10,532	10,532									
Total Revenues	440,924	294,967	-	19,904	-	33,343	25,194	67,516	-	-	-
Operating Expenses **(b)**	273,174	237,616	-	5,723	-	6,068	9,869	13,898	-	-	-
Depreciation and Amortization **(b)**	38,447	34,170	-	396	-	861	902	2,117	-	-	-
Property Tax **(c)**	24,578	16,442	-	1,110	-	1,859	1,404	3,764	-	-	-
Income Tax **(d)**	31,474	(5,120)	-	4,784	-	9,240	4,760	17,810	-	-	-
Total Operating Expenses	367,673	283,109	-	12,013	-	18,028	16,935	37,588	-	-	-
Operating Income	73,251	11,858	-	7,892	-	15,314	8,258	29,928	-	-	-
Interest Expense **(e)**	23,184	20,003	-	281	-	615	687	1,597	-	-	-
Net Income	50,067	(8,145)	-	7,611	-	14,699	7,572	28,331	-	-	-
Rate Base **(f)**	822,118	709,336	-	9,960	-	21,817	24,355	56,648	-	-	-
Rate of Return **(g)**	8.91%	1.67%		79.23%		70.19%	33.91%	52.83%			

(a) Miscellaneous Revenue and Difference between bill count and general ledger revenues allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	81,541										
Percent of Taxable Income		-16.27%	0.00%	15.20%	0.00%	29.36%	15.12%	56.58%	0.00%	0.00%	0.00%
Income Tax		31,474	31,474	31,474	31,474	31,474	31,474	31,474	31,474	31,474	31,474
Allocated Income Tax		(5,120)	-	4,784	-	9,240	4,760	17,810	-	-	-
Income Tax											
Property Tax Allocation	24,578	66.90%	0.00%	4.51%	0.00%	7.56%	5.71%	15.31%	0.00%	0.00%	0.00%
Property Tax Allocation	24,578	16,442	-	1,109.53	-	1,858.61	1,404.37	3,763.53	-	-	-

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Proposed Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-2
Page 1
Witness: Kozoman

Change difference between G/L & Bill Count Revenues

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and **(1)** Revenue Annualizations	400,273	249,153	-	27,312	-	33,980	26,319	63,510	-	-	-
Difference Between Bill count and G/L Revenues **(a)(a1)**	5,483	5,483									
Misc. Revenue **(a)**	10,532	10,532									
Total Revenues	416,288	265,168	-	27,312	-	33,980	26,319	63,510	-	-	-
Operating Expenses **(b)**	273,174	237,616	-	5,723	-	6,068	9,869	13,898	-	-	-
Depreciation and Amortization **(b)**	38,447	34,170	-	396	-	861	902	2,117	-	-	-
Property Tax **(c)**	24,578	15,656	-	1,613	-	2,006	1,554	3,750	-	-	-
Income Tax **(d)**	19,432	(14,437)	-	6,591	-	8,342	4,544	14,393	-	-	-
Total Operating Expenses	355,631	273,005	-	14,322	-	17,278	16,869	34,157	-	-	-
Operating Income	60,656	(7,837)	-	12,990	-	16,702	9,450	29,352	-	-	-
Interest Expense **(e)**	23,184	20,003	-	281	-	615	687	1,597	-	-	-
Net Income	37,473	(27,840)	-	12,709	-	16,087	8,763	27,755	-	-	-
Rate Base **(f)**	822,118	709,336	-	9,960	-	21,817	24,355	56,648	-	-	-
Rate of Return **(g)**	7.38%	-1.10%		130.42%		76.55%	38.80%	51.81%			
Percent of Total Customers		98.318%	0.000%	0.589%	0.000%	0.421%	0.252%	0.421%	0.000%	0.000%	0.000%

(1) Revenues are from ACC Staff Proposed Rates Bill Count.
(a) Miscellaneous Revenue and Difference between bill count and general ledger revenues allocated to 5/8 Inch Customer Class.
(a1) Difference between Revenues per general ledger and bill count reduced to reflect ACC Staff's Proposed Rate Reduction
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	56,905										
Percent of Taxable Income		-74%	0%	34%	0%	43%	23%	74%	0%	0%	0%
Income Tax		19,432	19,432	19,432	19,432	19,432	19,432	19,432	19,432	19,432	19,432
Allocated Income Tax		(14,437)	-	6,591	-	8,342	4,544	14,393	-	-	-
Percent of Revenues		63.70%	0.00%	6.56%	0.00%	8.16%	6.32%	15.26%	0.00%	0.00%	0.00%
Property Tax Allocation	24,578	15,656	-	1,613	-	2,006	1,554	3,750	-	-	-

Arizona American - Havasu Water
Test Year Ended December 31, 2000
Cost of Service Study Using Commodity / Demand Method
Allocation of Assets to Customer Classes Using ACC Staff Net Plant

Exhibit
Rebuttal Schedule G-3
Page 1
Witness: Kozoman

Line No.		Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
1	Plant, Minus Accumulated Depreciation, Advances and Contributions in Aid and Meter Deposits (from Schedule G-5, Page 1)											
2	Commodity	25,571	18,068	-	1,741	-	1,071	2,742	1,950	-	-	-
3	Demand	441,449	368,741	-	5,520	-	12,617	15,141	39,429	-	-	-
4	Customer	83,365	81,963	-	491	-	351	210	351	-	-	-
5	Service	140,834	136,441	-	932	-	929	740	1,792	-	-	-
6	Meter	130,899	104,123	-	1,277	-	6,850	5,522	13,127	-	-	-
7	Totals	822,118	709,336	-	9,960	-	21,817	24,355	56,648	-	-	-
8												
9												
10	Commodity	-	-	-	-	-	-	-	-	-	-	-
11	Demand	-	-	-	-	-	-	-	-	-	-	-
12	Customer											
13	Service											
14	Meter											
15	Totals	-	-	-	-	-	-	-	-	-	-	-
16												
17												
18				-	-	-	-	-	-	-		
19				-	-	-	-	-	-	-	-	-
20				-	-	-	-	-	-	-		
21				-	-	-	-	-	-	-	-	-
22												
23	Net Rate Base	822,118	709,336	-	9,960	-	21,817	24,355	56,648	-	-	-
24												
		ACC Staff Interest Expense										
	Interest Expense Allocation	23,184	20,003	-	281	-	615	687	1,597	-	-	-
	Ratio of rate bases to total rate base		86.2816%	0.0000%	1.2115%	0.0000%	2.6538%	2.9625%	6.8906%	0.0000%	0.0000%	0.0000%

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Customer Classes Using ACC Staff Expenses

Exhibit
Rebuttal Schedule G-4
Page 1
Witness: Kozoman

	Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Operation and Maintenance Expense (from Schedule G-6, Page 1)											
Commodity	56,147	39,672	-	3,822	-	2,351	6,021	4,281	-	-	-
Demand	83,721	69,932	-	1,047	-	2,393	2,871	7,478	-	-	-
Customer	103,863	102,115	-	611	-	437	262	437	-	-	-
Service	14,281	13,835	-	95	-	94	75	182	-	-	-
Meter	15,163	12,061	-	148	-	793	640	1,521	-	-	-
Totals	273,174	237,616	-	5,723	-	6,068	9,869	13,898	-	-	-
Depreciaton Expense on Plant (from Schedule G-6, Page 2)											
Commodity	697	493	-	47	-	29	75	53	-	-	-
Demand	14,848	12,402	-	186	-	424	509	1,326	-	-	-
Customer	11,425	11,233	-	67	-	48	29	48	-	-	-
Service	5,268	5,103	-	35	-	35	28	67	-	-	-
Meter	6,209	4,939	-	61	-	325	262	623	-	-	-
Totals	38,447	34,170	-	396	-	861	902	2,117	-	-	-
Total Expenses (excluding Income Tax and Property Taxes)	311,621	271,787	-	6,119	-	6,929	10,771	16,015	-	-	-

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Rate Base by Function Using ACC Staff Plant and Accumulated Depreciation

Exhibit
Rebuttal Schedule G-5
Page 1
Witness: Kozoman

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Rate Base							
Plant minus (Accumulated Depreciation Contributions in Aid of Construction Advances in Aid of Construction and Meter Deposits)	822,118	441,449	25,571	83,365	130,899	140,834	822,118
	822,118	441,449	25,571	83,365	130,899	140,834	822,118

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Allocation of Property Taxes to Functions							
Revenue Requirement by Function	409,726	146,861	62,905	130,577	35,189	34,195	409,726
						-	-
Total Revenue Requirement	409,726	146,861	62,905	130,577	35,189	34,195	409,726
Property Taxes Allocation	24,578	8,810	3,773	7,833	2,111	2,051	24,578

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of
Construction and Meter Deposits Using ACC Staff Plant and Accumulated Depreciation to Functions

Exhibit
Rebuttal Schedule G-5
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accum. Depr. Adjustments (Adj. 1)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible												
301.00	Organization	10,144	-		10,144	-	10,144	10,144					10,144
302.00	Franchises	-	-		-	-	-	-					-
303.00	Miscellaneous Intangibles	-	-		-	-	-	-					-
Total Intangible Plant		10,144	-		10,144	-	10,144						-
													-
	Source of Supply												-
310.00	Land and Land Rights	7,771	-		7,771	0	7,771	7,771					7,771
311.00	Structures and Improvements	63,763	8,782	(364)	55,345	357	54,988	54,988					54,988
312.00	Collecting and Impounding Res.	148,253	19,259		128,994	1,882	127,112	127,112					127,112
313.00	Lakes, Rivers, Other Intakes	-	-		-	-	-	-	-				-
314.00	Wells and Springs	36,089	75,605	(17,553)	(21,963)	1,359	(23,321)	(20,989)	(2,332)				(23,321)
Total Source of Supply Plant		255,876	103,645	(17,917)	170,147	3,597	166,550						-
													-
	Pumping												-
320.00	Land and Land Rights	-	-		-	-	-	-					-
321.00	Structures and Improvements	-	-		-	-	-	-	-				-
323.00	Other Power Production	22,738	10,719		12,019	582	11,438	10,294	1,144				11,438
325.00	Electric Pumping Equipment	254,730	45,084	(204)	209,850	4,727	205,122	184,610	20,512				205,122
326.00	Diesel Pumping Equipment	-	-		-	-	-	-	-				-
328.10	Gas Engine Pumping Equipment	-	-		-	-	-	-	-				-
Total Pumping Plant		277,468	55,803	(204)	221,869	5,309	216,560						-
													-
	Water Treatment												-
330.00	Land and Land Rights	-	-		-	-	-	-					-
331.00	Structures and Improvements	-	-		-	-	-	-	-				-
332.00	Water Treatment Equipment	25,315	24,643		672	1,518	(847)	(762)	(85)				(847)
Total Water Treatment Plant		25,315	24,643	-	672	1,518	(847)						-
													-
	Transmission and Distribution												-
340.00	Land and Land Rights	-	-		-	-	-	-					-
341.00	Structures and Improvements	-	-		-	-	-	-	-				-
342.00	Distribution, Reservoirs, & ST	225,871	55,856		170,015	1,759	168,256	151,430	16,826				168,256
343.00	Transmission and Distribution	774,027	172,563		601,464	6,832	594,632	535,169	59,463				594,632
344.00	Fire Mains	-	-		-	-	-						-
345.00	Services	182,275	27,743		154,532	2,632	151,900					151,900	151,900
346.00	Meters	176,386	42,384		134,002	3,103	130,899				130,899		130,899
348.00	Hydrants	-	-		-	-	-			-			-
349.00	Other Transmission & Distribution	-	-		-	-	-	-	-				-
Total Transmission and Distribution Plant		1,358,559	298,545	-	1,060,014	14,327	1,045,687						

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of Construction and Meter Deposits

Exhibit
Rebuttal Schedule G-5
Page 2a
Witness: Kozoman

		ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accumulated Depr. Adj. (Adj. 1)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
ALLOCATED COMMON PLANT													
Maricopa Common Plant													
389.00	Land and Land Rights	25	-		25	-	25	25					25
390.00	Structures and Improvements	10,577	5,078		5,499	0	5,499	5,499					5,499
391.00	Office Funiture and Equipment	22,445	813		21,632	96	21,535			21,535			21,535
391.10	Computer Equipment	33,449	(7,397)		40,846	221	40,624			40,624			40,624
392.00	Transportation Equipment	45,234	24,571		20,663	10,607	10,056	2,514		7,542			10,056
393.00	Stores Equipment	247	163		84	-	84			84			84
394.00	Tools, Shop and Garage	10,104	6,491		3,613	266	3,348			3,348			3,348
395.00	Laboratory Equipment	627	447		180	-	180			180			180
396.00	Power Operated Equipment	11,684	4,124		7,560	422	7,137	1,784		5,353			7,137
397.00	Communication Equipment	7,477	1,198		6,279	386	5,894	1,473		4,420			5,894
398.00	Miscellaneous Equipment	934	637		297	18	279			279			279
Total Common Plant		142,803	36,126	-	106,677	12,016	94,661						
					-		-	-					-
					-		-	-					-
	TOTAL WATER PLANT	2,070,165	518,763	(18,120)	1,569,522	36,768	1,532,755	1,071,063	95,528	83,365	130,899	151,900	1,532,755
Total Plant		2,070,165			1,569,522								
	Adjustments to Accumulated Depreciation												
Company's additional Accumulated Depreciation Adjustment			36,768		(36,768)								-
			555,531										
	Total Net Plant				1,532,755								
	Advances in Aid of Construction				418,704		(418,704)	(376,834)	(41,870)				(418,704)
	Contributions in Aid of Construction				280,867		(280,867)	(252,780)	(28,087)				(280,867)
	Customer Meter Deposits				11,066		(11,066)					(11,066)	(11,066)
	Total Rate Base				822,118		822,118	441,449	25,571	83,365	130,899	140,834	822,118

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of ACC Staff Expenses to Functions

Exhibit
Rebuttal Schedule G-6
Page 1
Witness: Kozoman

		ACC Staff Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Salaries and Wages	(a)	59,846	14,872	1,652	35,626	7,696	-	59,846
Purchased Water		806		806				806
Purchased Power		47,138		47,138				47,138
Chemicals		(1,099)		(1,099)				(1,099)
Repairs and Maintenance	(b)	75,805	55,069	6,119	-	336	14,281	75,805
Office Supplies and Expense		9,893			9,893			9,893
Outside Services		13,709			13,709			13,709
Service Company Charges		-	-	-	-	-	-	-
Water Testing		-		-				-
Rents		1,837			1,837			1,837
Transportation Expenses		-			-			-
Insurance - General Liability		6,879			6,879			6,879
Insurance - Health and Life		-	-		-			-
Regulatory Commission Expense - Rate Case		2,910			2,910			2,910
Miscellaneous Expense		47,502	11,805	1,312	28,277	6,108	-	47,502
Depreciation Expense, Allocated on Rebuttal Schedule G-6, Page 2								-
Taxes Other Than Income		7,949	1,975	219	4,732	1,022	-	7,949
Property Taxes, Allocated on Rebuttal Schedules G-1 & G-2				-	-			-
Income Tax, Allocated on Rebuttal Schedules G-1 & G-2								
		273,174	83,721	56,147	103,863	15,163	14,281	273,174

(a) Labor (Wages and Salaries) factor computations shown on Rebuttal Schedule G-7, Page 2a
(b) Repairs and Maintenance allocation factors computation shown on Rebuttal Schedule G-7, Page 2a

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciatio Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible										-
301.00	Organization	10,144		-							-
302.00	Franchises	-		-							-
303.00	Miscellaneous Intangibles	-		-							-
	Subtotal Intangible	10,144		-							-
											-
	Source of Supply										-
310.00	Land and Land Rights	7,771		-							-
311.00	Structures and Improvements	63,763	2.790%	714	714	714					714
312.00	Collecting and Impounding Res.	148,253	2.540%	3,766	3,766	3,766					3,766
313.00	Lakes, Rivers, Other Intakes	-		-	-						-
314.00	Wells and Springs	36,089	2.540%	2,718	2,718	2,446	272				2,718
	Subtotal Source of Supply	255,876		7,197							-
											-
	Pumping										-
320.00	Land and Land Rights	-		-	-						-
321.00	Structures and Improvements	-		-	-	-	-				-
323.00	Other Power Production	22,738	5.120%	1,164	1,164	1,048	116				1,164
325.00	Electric Pumping Equipment	254,730	3.710%	9,460	9,460	8,514	946				9,460
326.00	Diesel Pumping Equipment	-		-	-	-	-				-
328.10	Gas Engine Pumping Equipment	-		-	-	-	-				-
	Subtotal Pumping	277,468		10,624							-
											-
	Water Treatment										-
330.00	Land and Land Rights				-						-
331.00	Structures and Improvements	-		-	-	-	-				-
332.00	Water Treatment Equipment	25,315	12.000%	3,038	3,038	2,734	304				3,038
	Subtotal Water Treatment	25,315		3,038							-
											-
	Transmission and Distribution										-
340.00	Land and Land Rights	-		-	-						-
341.00	Structures and Improvements	-		-	-	-	-				-
342.00	Distribution, Reservoirs, & ST	225,871	2.330%	3,520	3,520	3,168	352				3,520
343.00	Transmission and Distribution	774,027	2.100%	15,158	15,158	13,642	1,516				15,158
344.00	Fire Mains	-		-	-						-
345.00	Services	182,275	2.890%	5,268	5,268					5,268	5,268
346.00	Meters	176,386	3.520%	6,209	6,209				6,209		6,209
348.00	Hydrants	-		-	-			-			-
349.00	Other Transmission & Distribution	-		-	-	-	-				-
	Subtotal Transmission and Distribution	1,358,559		30,155							

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2a
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciation Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	General										
389.00	Land and Land Rights	25		-							-
390.00	Structures and Improvements	10,577	2.030%	215	215	215					215
391.00	Office Funiture and Equipment	22,445	4.099%	414	414			414			414
391.10	Computer Equipment	33,449	4.099%	1,025	1,025			1,025			1,025
392.00	Transportation Equipment	45,234	25.000%	11,309	11,309	2,827		8,481			11,309
393.00	Stores Equipment	247	3.930%	10	10			10			10
394.00	Tools, Shop and Garage	10,104	7.552%	763	763			763			763
395.00	Laboratory Equipment	627	3.064%	19	19			19			19
396.00	Power Operated Equipment	11,684	9.230%	567	567	142		425			567
397.00	Communication Equipment	7,477	4.104%	307	307	77		230			307
398.00	Miscellaneous Equipment	934	6.190%	58	58			58			58
	Subtotal General	142,803		14,686				-			
								-			-
					-	-					-
	Amortization of Deferred Regulatory Assets	24,785	3.365%	834	834	834					834
	Subtotals	2,094,950		66,533							-
				-							
				-							
						-					-
						-					-
											-
	Less: Amotization of Contributions	280,867	10.00%	(28,087)	(28,087)	(25,278)	(2,809)				(28,087)
	Total Depreciation Expense			38,447	38,447	14,848	697	11,425	6,209	5,268	38,447

Arizona American - Havasu Water
Test Year Ended December 31, 2001
SUMMARY OF COMMODITY - DEMAND METHOD FUNCTION FACTORS

Exhibit
Rebuttal Schedule G-7
Page 1
Witness: Kozoman

Line No.	Description	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Totals
1												
2	Description	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Totals
3	Commodity	70.658%	0.000%	6.807%	0.000%	4.187%	10.723%	7.625%	0.000%	0.000%	0.00%	100.00%
4	Demand	83.530%	0.000%	1.250%	0.000%	2.858%	3.430%	8.932%	0.000%	0.000%	0.00%	100.00%
5	Customer	98.318%	0.000%	0.589%	0.000%	0.421%	0.252%	0.421%	0.000%	0.000%	0.00%	100.00%
6	Services	96.881%	0.000%	0.662%	0.000%	0.659%	0.525%	1.272%	0.000%	0.000%	0.00%	100.00%
7	Meters	79.544%	0.000%	0.975%	0.000%	5.233%	4.219%	10.029%	0.000%	0.000%	0.00%	100.00%
8												
9												
10												
11												
12												
13												

Arizona American - Havasu Water
Test Year Ended December 31, 2001
COMMODITY - DEMAND METHOD FUNCTION FACTORS
Plant and Depreciation Expense Allocations

Exhibit
Rebuttal Schedule G-7
Page 2
Witness: Kozoman

Line No.	Description	Total	Demand	Commodity	Customer
1					
2					
3	Wells	1.00	0.90	0.10	
4	Pumps & Equipment	1.00	0.90	0.10	
5	Distribution Mains	1.00	0.90	0.10	
6	Customer	1.00			1.00
7	Services	1.00			1.00
8	Meters	1.00			1.00
9	Fire Hydrants	1.00			1.00
10	Transportation Equip.	1.00	0.25		0.75
11	Office Furniture	1.00			1.00
12	Communication Equip.	1.00	0.25		0.75
13					
14					

15 **To Approximately Match ACC Staff Proposed Rates for 5/8 Inch Meter**
16 Demand and Commodity Allocation to Wells, Pumps and Equipment and
17 Distribution Mains would need to be changed to approximately match
18 ACC Staff's proposed monthly minimums and commodity rates. The
19 match would be ACC Staff's Proposed Rates to Computed Monthly
20 Minimum and Commodity rate WITHOUT Equity returns and
21 Income Taxes. Match would be based on cost only.
22
23 **Required Allocations:**

24	Description	Total	Demand	Commodity	Customer
25	Wells	1.00	(0.55)	1.55	
26	Pumps & Equipment	1.00	(0.55)	1.55	
27	Distribution Mains	1.00	(0.55)	1.55	

28
29
30
31
32
33
34
35
36

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 2a
Witness: Kozoman

Labor Allocation Factors		
Pumping Labor	27.61%	pumpinglabor
Meter Labor	12.86%	meterlabor
Customer Labor	59.53%	customerlabor
	100.00%	

Repairs and Maintenance Allocation Factors		
Repairs and Maintenance Demand	0.00%	rmdemand
Repairs and Maintenance Pumping	30.05%	rmpumping
Repairs and Maintenance Mains	50.67%	rmmains
Repairs and Maintenance Services	18.84%	rmservices
Repairs and Maintenance Meters	0.44%	rmmeters
Repairs and Maintenance Customer	0.00%	rmcustomer
	100.00%	

Computations shown on this work sheet are from page labeled asTrial Balance in this work book. Allocation percentage were computed based on Expenses charged by Citizens Utilities and are then applied to proforma amounts.

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF CLASS ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 3
Witness: Kozoman

COMMODITY ALLOCATION FACTOR

Meter Size	(a) Total Gallons (in 1,000's) In Test Year	Percent of Total
5/8" x 3/4"	113,494	70.66%
3/4"	-	0.00%
1"	10,934	6.81%
1-1/2"	-	0.00%
2"	6,725	4.19%
3"	17,224	10.72%
4"	12,247	7.62%
6"	-	0.00%
8"	-	0.000%
10"	-	0.000%
Totals	160,624	100.00%

DEMAND ALLOCATION FACTOR

Meter Size	(a) Number of Meters and/or Services	Equiv-alent Weight	Equivalent Number of Meters and/or Services	Percent of Total
5/8" x 3/4	1,169	1.0	1,169	83.53%
3/4"	-	1.5	0	0.00%
1"	7	2.5	18	1.25%
1-1/2"	-	5.0	0	0.00%
2"	5	8.0	40	2.86%
3"	3	16.0	48	3.43%
4"	5	25.0	125	8.93%
6"	-	50.0	0	0.00%
8"	-	80.0	0	0.00%
10"	-	160.0	0	0.00%
Totals	1,189		1,400	100.00%

CUSTOMER ALLOCATION FACTOR

Meter Size	Number of Meters	Percent of Total
5/8" x 3/4"	1,169	98.32%
3/4"	0	0.00%
1"	7	0.59%
1-1/2"	0	0.00%
2"	5	0.42%
3"	3	0.25%
4"	5	0.42%
6"	0	0.00%
8"	0	0.00%
10"	0	0.00%
Totals	1,189	100.00%

SERVICES ALLOCATION FACTOR (b)

Meter Size	Number of Services	Install-ation Cost	Weighted Number Services	Percent of Total
5/8" x 3/4	1,169	$ 355.00	414,995	96.88%
3/4"	0	355.00	0	0.00%
1"	7	405.00	2,835	0.66%
1-1/2"	0	435.00	0	0.00%
2"	5	565.00	2,825	0.66%
3"	3	750.00	2,250	0.53%
4"	5	1,090.00	5,450	1.27%
6"	0	1,600.00	0	0.00%
8"	0	1,600.00	0	0.00%
10"	0	1,600.00	0	0.00%
Totals	1,189		428,355	100.00%

METER ALLOCATION FACTOR (b)

Meter Size	Number of Meters	Meter Cost	Weighted Dollars of Meters	Percent of Total
5/8" x 3/4"	1,169	$ 105.00	122,745	79.54%
3/4"	0	105.00	0	0.00%
1"	7	215.00	1,505	0.98%
1-1/2"	0	425.00	0	0.00%
2"	5	1,615.00	8,075	5.23%
3"	3	2,170.00	6,510	4.22%
4"	5	3,095.00	15,475	10.03%
6"	0	6,070.00	0	0.00%
8"	0	6,070.00	0	0.00%
10"	0	6,070.00	0	0.00%
Totals	1,189		154,310	100.00%

(a) Includes customer and gallon sold annualization

(b) Meter and Service Line cost from Arizona Corporation Commission Memo of April 23, 2002 from Marlin Scott, Jr.. Meter costs based on compound meters. Cost of service line and

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Including Debt, Equity, and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	83,365	140,834	130,899	355,098
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	2,351	3,972	3,691	10,014
4	Rate Bases	83,365	140,834	130,899	355,098
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	3,135	5,295	4,922	13,352
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	5,105	8,624	8,016	21,745
9					
10	Revenue Requirement for Debt Component, from Line 3	2,351	3,972	3,691	10,014
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	5,105	8,624	8,016	21,745
13	Total Return Requirement with Income Tax	7,456	12,596	11,707	31,759
14					
15	Property Tax Expense, from Schedule G-5, Page 1	7,833	2,051	2,111	11,995
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	103,863	14,281	15,163	133,306
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	11,425	5,268	6,209	22,902
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	130,577	34,195	35,189	199,961
19					
20	**Customer Charge**				
21	Number of Bills = 1,189 times 12	14,268			
22					
23	**Charge per Bill**	$ 9.15			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 1,400 times 12		16,794	16,794	
28					
29	**Charge per Equivalent Meter**		$ 2.04	$ 2.10	
30					
31					

32	CUSTOMER CHARGE:	
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge)	
34	Charge per Bill (Customer Charge with Equity Return and Income Tax)	$ 9.15
35	Charge per Equivalent Meter (For Service Line Charge with Equity Return and Income Tax)	2.04
36	Charge per Equivalent Meter (For Meter Charge with Equity Return and Income Tax)	2.10
37	(Service and Meter Revenue Requirement divided by Annual Equivalent Meters)	
38	Monthly Minimum for 5/8 x 3/4 Inch Meter	$ 13.28
39		

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Excluding Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1a
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	83,365	140,834	130,899	355,098
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	2,351	3,972	3,691	10,014
4	Rate Bases	83,365	140,834	130,899	355,098
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	0.00%	0.00%	0.00%	0.00%
6	Required Operating Income for Equity	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-
9					
10	Revenue Requirement for Debt Component, from Line 3	2,351	3,972	3,691	10,014
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	-	-	-	-
13	Total Return Requirement with Income Tax	2,351	3,972	3,691	10,014
14					
15	Property Tax Expense, from Schedule G-5, Page 1	7,833	2,051	2,111	11,995
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	103,863	14,281	15,163	133,306
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	11,425	5,268	6,209	22,902
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	125,472	25,571	27,174	178,216
19					
20	**Customer Charge**				
21	Number of Bills = 1,189 times 12	14,268			
22					
23	**Charge per Bill**	$ 8.79			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 1,400 times 12		16,794	16,794	
28					
29	**Charge per Equivalent Meter**		$ 1.52	$ 1.62	
30	**Actual Cost (without Equity Return or Income Taxes)**				
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge, nor recovery of return or income tax)				
34	Charge per Bill (Customer Charge without Equity Return or Income Tax)	$ 8.79			
35	Charge per Equivalent Meter (For Service Line Charge without Equity Return or Income Tax)	1.52			
36	Charge per Equivalent Meter (For Meter Charge without Equity Return or Income Tax)	1.62			
37	(Service and Meter Revenue Requirement divided by Annualized Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter without recovery of Equity Return or Income Tax	$ 11.93			

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Including Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	441,449
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	12,449
5	Rate Base	441,449
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%
7	Required Operating Income for Equity	16,598
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	27,033
10		
11	Revenue Requirement for Debt Component, from Line 4	12,449
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	27,033
14		
15	Property Tax Expense, from Schedule G-5, Page 1	8,810
16	Demand Expenses, from Schedule G-6, Page 1	83,721
17	Depreciation, from Schedule G-6, Page 2	14,848
18	Totals	146,861
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	16,794
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 8.74
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 8.74	1.0	$ 8.74
26	3/4 Inch Meter	$ 8.74	1.5	13.12
27	1 Inch Meter	$ 8.74	2.5	21.86
28	1 1/2 Inch Meter	$ 8.74	5.0	43.72
29	2 Inch Meter	$ 8.74	8.0	69.96
30	3 Inch Meter	$ 8.74	15.0	131.17
31	4 Inch Meter	$ 8.74	25.0	218.62
32	6 Inch Meter	$ 8.74	50.0	437.24
33	8 Inch Meter	$ 8.74	80.0	699.59
34	10 Inch Meter	$ 8.74	160.0	1,399.17

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Excluding Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2a
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	441,449
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	12,449
5	Rate Base	441,449
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	
7	Required Operating Income for Equity	-
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	-
10		
11	Revenue Requirement for Debt Component, from Line 4	12,449
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	-
14		
15	Property Tax Expense, from Schedule G-5, Page 1	8,810
16	Demand Expenses, from Schedule G-6, Page 1	83,721
17	Depreciation, from Schedule G-6, Page 2	14,848
18	Totals	119,828
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	16,794
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 7.14
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 7.14	1.0	$ 7.14
26	3/4 Inch Meter	$ 7.14	1.5	10.70
27	1 Inch Meter	$ 7.14	2.5	17.84
28	1 1/2 Inch Meter	$ 7.14	5.0	35.68
29	2 Inch Meter	$ 7.14	8.0	57.08
30	3 Inch Meter	$ 7.14	15.0	107.03
31	4 Inch Meter	$ 7.14	25.0	178.38
32	6 Inch Meter	$ 7.14	50.0	356.76
33	8 Inch Meter	$ 7.14	80.0	570.81
34	10 Inch Meter	$ 7.14	160.0	1,141.63

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including and Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 3
Witness: Kozoman

Including Equity Return and Income Taxes

Line No.		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Proposed Monthly Minimum to Computed Minimum
1	5/8 x 3/4 Inch Meter	$ 9.15	$ 2.04	$ 2.10	$ 8.74	$ 22.03	$ 9.24	41.95%
2	3/4 Inch Meter	9.15	3.05	3.14	13.12	28.47		
3	1 Inch Meter	9.15	5.09	5.24	21.86	41.34	$ 15.80	38.22%
4	1 1/2 Inch Meter	9.15	10.18	10.48	43.72	73.53		
5	2 Inch Meter	9.15	16.29	16.76	69.96	112.16	$ 31.04	27.67%
6	3 Inch Meter	9.15	30.54	31.43	131.17	202.30		
7	4 Inch Meter	9.15	50.90	52.38	218.62	331.06	$ 53.21	16.07%
8	6 Inch Meter	9.15	101.81	104.77	437.24	652.97		
9	8 Inch Meter	9.15	162.89	251.44	699.59	1,123.07		
10	10 Inch Meter	9.15	488.68	838.14	1,399.17	2,735.15		
11								
12	**Excluding Equity Return and Income Taxes**							
13								
14								
15								
16								
17								
18		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Proposed Monthly Minimum to Computed Minimum
19								
20	5/8 x 3/4 Inch Meter	$ 8.79	$ 1.52	$ 1.62	$ 7.14	$ 19.07	$ 9.24	48.45%
21	3/4 Inch Meter	8.79	2.28	2.43	10.70	24.21	$ -	
22	1 Inch Meter	8.79	3.81	4.05	17.84	34.48	$ 15.80	45.82%
23	1 1/2 Inch Meter	8.79	7.61	8.09	35.68	60.17	$ -	
24	2 Inch Meter	8.79	12.18	12.94	57.08	91.00	$ 31.04	34.11%
25	3 Inch Meter	8.79	22.84	24.27	107.03	162.93	$ -	
26	4 Inch Meter	8.79	38.07	40.45	178.38	265.69	$ 53.21	20.03%
27	6 Inch Meter	8.79	76.13	80.90	356.76	522.59	$ -	
28	8 Inch Meter	8.79	121.81	129.44	570.81	830.86	$ -	
29	10 Inch Meter	8.79	243.62	258.89	1,141.63	1,652.93	$ -	
30								

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses and Return

Exhibit
Schedule G-8
Page 4
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	25,571	83,365	140,834	130,899	441,449	822,118
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.820%	2.820%	2.820%	2.820%	2.820%	2.820%
3	Required Operating Income - for Debt	721	2,351	3,972	3,691	12,449	23,184
4	Rate Bases from Schedule G-5, Page 1	25,571	83,365	140,834	130,899	441,449	822,118
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	961	3,135	5,295	4,922	16,598	30,912
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	1,566	5,105	8,624	8,016	27,033	50,344
9							
10	Revenue Requirement for Debt Component, from Line 3	721	2,351	3,972	3,691	12,449	23,184
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	1,566	5,105	8,624	8,016	27,033	50,344
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	2,287	7,456	12,596	11,707	39,482	73,527
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	3,773	7,833	2,051	2,111	8,810	24,578
16	Expenses (From Sch. G-6. Page 1)	56,147	103,863	14,281	15,163	83,721	273,174
17	Depreciation and Amortization (From Schedule G-6, Page 2)	697	11,425	5,268	6,209	14,848	38,447
18	Total Revenue Requirement by function	62,905	130,577	34,195	35,189	146,861	409,726
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	160,624	14,268	16,794	16,794	16,794	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.3916					
22	(Line 18 divided by Line 20)		$ 9.15	$ 2.04	$ 2.10	$ 8.74	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 22.03	
24							

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses and Return

Exhibit
Schedule G-8
Page 4a
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	25,571	83,365	140,834	130,899	441,449	822,118
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	721	2,351	3,972	3,691	12,449	23,184
4	Rate Bases from Schedule G-5, Page 1	25,571	83,365	140,834	130,899	441,449	822,118
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	-	-	-	-	-	-
6	Required Operating Income for Equity	-	-	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	-	-	-	-	-	-
8	Equity Return plus Income tax component (Line 6 x Line 7)						
9							
10	Revenue Requirement for Debt Component, from Line 3	721	2,351	3,972	3,691	12,449	23,184
11	Revenue Requirement for Equity and Income Tax Component, from Line 8	-	-	-	-	-	-
12							
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	721	2,351	3,972	3,691	12,449	23,184
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	3,773	7,833	2,051	2,111	8,810	24,578
16	Expenses (From Sch. G-6. Page 1)	56,147	103,863	14,281	15,163	83,721	273,174
17	Depreciation and Amortization (From Schedule G-6, Page 2)	697	11,425	5,268	6,209	14,848	38,447
18	Total Revenue Requirement by function	61,339	125,472	25,571	27,174	119,828	359,383
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	160,624	14,268	16,794	16,794	16,794	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.3819					
22	(Line 18 divided by Line 20)		$ 8.7939	$ 1.5226	$ 1.6181	$ 7.1352	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 19.07	

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **without** Equity Return or Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 1
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4a	$ 0.3819
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	$ 7.14
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	8.79
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	1.52
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	1.62
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4a	$ 19.07

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 9.24
Proposed Commodity Rate			
0	to	4,000	$ 0.81
4,001	to	100,000	$ 1.21
Over 100,001			$ 1.45

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4)
	Computed Costs, without Equity Return or Income Taxes									Recovery of Expenses or, (Lack of Recovery)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	
22	-	$ 19.07	-	$ 19.07		-	$ 9.24		$ 9.24	$ (9.83)
23	1,000	$ 19.07	$ 0.3819	$ 19.45		1,000	9.24	$ 0.81	10.05	(9.40)
24	2,000	19.07	0.76	19.83		2,000	9.24	1.62	10.86	(8.97)
25	3,000	19.07	1.15	20.22		3,000	9.24	2.43	11.67	(8.55)
26	4,000	19.07	1.53	20.60		4,000	9.24	3.24	12.48	(8.12)
27	5,000	19.07	1.91	20.98		5,000	9.24	4.45	13.69	(7.29)
28	6,000	19.07	2.29	21.36		6,000	9.24	5.66	14.90	(6.46)
29	7,000	19.07	2.67	21.74		7,000	9.24	6.87	16.11	(5.63)
30	8,000	19.07	3.06	22.12		8,000	9.24	8.08	17.32	(4.80)
31	9,000	19.07	3.44	22.51		9,000	9.24	9.29	18.53	(3.98)
32	10,000	19.07	3.82	22.89		10,000	9.24	10.50	19.74	(3.15)
33	11,000	19.07	4.20	23.27		11,000	9.24	11.71	20.95	(2.32)
34	12,000	19.07	4.58	23.65		12,000	9.24	12.92	22.16	(1.49)
35	13,000	19.07	4.96	24.03	**Usage**	13,000	9.24	14.13	23.37	(0.66)
36	**13,805**	19.07	5.27	24.34	**<-Level->**	**13,805**	9.24	15.10	24.34	0.00
37	14,000	19.07	5.35	24.42	**When**	14,000	9.24	15.34	24.58	0.16
38	15,000	19.07	5.73	24.80	**Revenues**	15,000	9.24	16.55	25.79	0.99
39	16,000	19.07	6.11	25.18	**Equal**	16,000	9.24	17.76	27.00	1.82
40	17,000	19.07	6.49	25.56	**Expenses**	17,000	9.24	18.97	28.21	2.65
41	18,000	19.07	6.87	25.94		18,000	9.24	20.18	29.42	3.48
42	19,000	19.07	7.26	26.33	**(No Rate**	19,000	9.24	21.39	30.63	4.30
43	20,000	19.07	7.64	26.71	**of Return**	20,000	9.24	22.60	31.84	5.13
44	21,000	19.07	8.02	27.09	**on**	21,000	9.24	23.81	33.05	5.96
45	22,000	19.07	8.40	27.47	**Equity**	22,000	9.24	25.02	34.26	6.79
46	23,000	19.07	8.78	27.85	**or**	23,000	9.24	26.23	35.47	7.62
47	24,000	19.07	9.17	28.23	**Income**	24,000	9.24	27.44	36.68	8.45
48	25,000	19.07	9.55	28.62	**Taxes**	25,000	9.24	28.65	37.89	9.27
49	26,000	19.07	9.93	29.00	**Included)**	26,000	9.24	29.86	39.10	10.10
50	27,000	19.07	10.31	29.38		27,000	9.24	31.07	40.31	10.93
51	28,000	19.07	10.69	29.76		28,000	9.24	32.28	41.52	11.76
52	29,000	19.07	11.07	30.14		29,000	9.24	33.49	42.73	12.59
53	30,000	19.07	11.46	30.53		30,000	9.24	34.70	43.94	13.41
54	**Average Usage**					**Average Usage**				
55	7,650	19.07	2.92	21.99		7,650	9.24	7.66	16.90	**(5.09)**

Arizona American - Havasu Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **with** Equity Return or Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 2
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4	$ 0.3916
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	$ 8.74
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	9.15
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	2.10
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	2.04
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4	$ 22.03

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 9.24
Proposed Commodity Rate			
0	to	4,000	$ 0.81
4,001	to	100,000	$ 1.21
Over 100,001			$ 1.45

Computed Costs, with Equity Return and Income Taxes

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4) Recovery of Expenses Rate of Return & IncomeTax or (Lack of Recovery)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	
	-	$ 22.03	-	$ 22.03		-	$ 9.24		$ 9.24	$ (12.79)
	1,000	$ 22.03	$ 0.3916	$ 22.42		1,000	9.24	$ 0.81	10.05	(12.37)
	2,000	22.03	0.78	22.81		2,000	9.24	1.62	10.86	(11.95)
	3,000	22.03	1.17	23.20		3,000	9.24	2.43	11.67	(11.53)
	4,000	22.03	1.57	23.59		4,000	9.24	3.24	12.48	(11.11)
	5,000	22.03	1.96	23.99		5,000	9.24	4.45	13.69	(10.30)
	6,000	22.03	2.35	24.38		6,000	9.24	5.66	14.90	(9.48)
	7,000	22.03	2.74	24.77		7,000	9.24	6.87	16.11	(8.66)
	8,000	22.03	3.13	25.16		8,000	9.24	8.08	17.32	(7.84)
	9,000	22.03	3.52	25.55		9,000	9.24	9.29	18.53	(7.02)
	10,000	22.03	3.92	25.94		10,000	9.24	10.50	19.74	(6.20)
	11,000	22.03	4.31	26.34		11,000	9.24	11.71	20.95	(5.39)
	12,000	22.03	4.70	26.73		12,000	9.24	12.92	22.16	(4.57)
	13,000	22.03	5.09	27.12		13,000	9.24	14.13	23.37	(3.75)
	14,000	22.03	5.48	27.51		14,000	9.24	15.34	24.58	(2.93)
	15,000	22.03	5.87	27.90		15,000	9.24	16.55	25.79	(2.11)
	16,000	22.03	6.27	28.29		16,000	9.24	17.76	27.00	(1.29)
	17,000	22.03	6.66	28.69	**Usage**	17,000	9.24	18.97	28.21	(0.48)
	17,585	22.03	6.89	28.91	**<-Level->**	**17,585**	9.24	19.68	28.92	0.00
	18,000	22.03	7.05	29.08	**When**	18,000	9.24	20.18	29.42	0.34
	19,000	22.03	7.44	29.47	**Revenues**	19,000	9.24	21.39	30.63	1.16
	20,000	22.03	7.83	29.86	**Equal**	20,000	9.24	22.60	31.84	1.98
	21,000	22.03	8.22	30.25	**Expenses**	21,000	9.24	23.81	33.05	2.80
	22,000	22.03	8.62	30.64	**and**	22,000	9.24	25.02	34.26	3.62
	23,000	22.03	9.01	31.04	**Rate of**	23,000	9.24	26.23	35.47	4.43
	24,000	22.03	9.40	31.43	**Return**	24,000	9.24	27.44	36.68	5.25
	25,000	22.03	9.79	31.82	**and**	25,000	9.24	28.65	37.89	6.07
	26,000	22.03	10.18	32.21	**Income**	26,000	9.24	29.86	39.10	6.89
	27,000	22.03	10.57	32.60	**Taxes**	27,000	9.24	31.07	40.31	7.71
	28,000	22.03	10.97	32.99		28,000	9.24	32.28	41.52	8.53
	Average Usage					**Average Usage**				
	7,650	$ 22.03	$ 2.996	$ 25.02		7,650	$ 9.24	7.66	16.90	**(8.13)**

Arizona American - Havasu Water
Summary of Revenues by Customer Classification - Present and Proposed Rates
With Annualized Revenues to Year End Number of Customers
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size		Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8 Inch Residential		249,903	324,855	74,952	29.99%	56.31%	56.70%
2	1 Inch Residential		3,296	4,294	998	30.28%	0.74%	0.75%
3	1.5 Inch Residential		-	-	-		0.00%	0.00%
4	2 Inch Residential		1,580	2,055	476	30.11%	0.36%	0.36%
5	3 Inch Residential		-	-	-		0.00%	0.00%
6	4 Inch Residential		3,730	4,855	1,126	30.19%	0.84%	0.85%
7	6 Inch Residential		-	-	-		0.00%	0.00%
8	5/8 Inch Commercial		15,714	20,432	4,718	30.03%	3.54%	3.57%
9	1 Inch Commercial		7,007	9,112	2,105	30.03%	1.58%	1.59%
10	2 Inch Commercial		3,958	5,145	1,187	30.00%	0.89%	0.90%
11	3 Inch Commercial		30,088	39,132	9,044	30.06%	6.78%	6.83%
12	4 Inch Commercial		3,820	4,967	1,146	30.01%	0.86%	0.87%
13	6 inch Commercial		-	-	-		0.00%	0.00%
14	Multi-Family 44	1"	7,203	9,361	2,158	29.95%	1.62%	1.63%
15	Multi-Family 56	2"	7,741	10,058	2,316	29.92%	1.74%	1.76%
16	Multi-Family 64	4"	10,065	13,078	3,014	29.94%	2.27%	2.28%
17	Multi-Family 65	2"	9,406	12,222	2,817	29.94%	2.12%	2.13%
18	Multi-Family 67	4"	11,990	15,583	3,593	29.97%	2.70%	2.72%
19	Multi-Family 89	1"	13,438	16,696	3,257	24.24%	3.03%	2.91%
20	Multi-Family 102	2"	12,850	16,693	3,843	29.91%	2.90%	2.91%
21	Multi-Family 129	4"	16,174	21,032	4,858	30.03%	3.64%	3.67%
22	Multi-Family 153	4"	18,998	24,679	5,681	29.90%	4.28%	4.31%
23	Miscellaneous Revenues		10,532	10,532	-	0.00%	2.37%	1.84%
24	Difference between Bill Count Revenues							
25	and General Ledger Revenues		6,311	8,204	1,893	30.00%	1.42%	1.43%
26	**Subtotal Revenues**		$ 443,802	$ 572,985	129,182	29.11%	100.00%	100.00%
27								
28								
29				**Revenue Annualization**				Additional
30			**Present**	**Proposed**	**Dollar**	**Percent**		Gallons to
31			**Revenues**	**Revenues**	**Change**	**Change**	Bills to be Issued	be Pumped (In 1,000's)
32	5/8 Inch Residential		11,725	15,244	3,519	30.01%	620	4,686
33	1 Inch Residential		(3,296)	(4,294)	(998)	30.28%	(4)	(365)
34	2 Inch Residential		(1,428)	(1,858)	(430)	30.15%	(6)	(1,001)
35	4 Inch Residential		(4,464)	(5,808)	(1,345)	30.12%	(8)	(2,915)
36	5/8 Inch Commercial		783	1,018	235	30.06%	22	429
37	1 Inch Commercial		(541)	(702)	(161)	29.80%	(4)	(365)
38	2 Inch Commercial		(764)	(991)	(228)	29.82%	(5)	(460)
39	3 Inch Commercial		(4,894)	(6,367)	(1,473)	30.11%	(6)	(3,349)
40	Total Revenue Annualizations		(2,878)	(3,760)	(881)	30.62%	609	(3,339)
41	**Total Revenues**		440,924	569,225	128,301	29.10%		

Arizona American - Havasu Water
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size		(a) Average Number of Customers at 12/31/01	Average Consumption	Summer Revenues Present Rates	Summer Revenues Proposed Rates	Summer Proposed Increase Dollar Amount	Summer Proposed Increase Percent Amount	Winter Revenues Present Rates	Winter Revenues Proposed Rates	Winter Proposed Increase Dollar Amount	Winter Proposed Increase Percent Amount
1	5/8 Inch Residential		1,082	7,659	$ 19.46	$ 25.31	5.85	30.09%	$ 18.72	$ 24.31	5.59	29.84%
2	1 Inch Residential		0	569,250	824.02	1,073.49	249.48	30.28%	761.51	988.26	226.75	29.78%
3	1.5 Inch Residential											
4	2 Inch Residential		1	166,833	269.08	350.47	81.39	30.25%	250.84	325.60	74.76	29.80%
5	3 Inch Residential		-	-	45.60	59.28	13.68	30.00%	45.60	59.28	13.68	30.00%
6	4 Inch Residential		1	291,500	470.11	612.31	142.20	30.25%	438.16	568.73	130.58	29.80%
7	6 Inch Residential											
8	5/8 Inch Commercial		33	22,384	40.37	52.55	12.19	30.19%	38.01	49.34	11.33	29.80%
9	1 Inch Commercial		5	68,625	113.13	147.34	34.21	30.24%	105.69	137.19	31.50	29.81%
10	2 Inch Commercial		2	76,793	141.23	183.90	42.67	30.21%	132.89	172.53	39.64	29.83%
11	3 Inch Commercial		4	489,810	739.71	963.58	223.87	30.26%	685.94	890.26	204.32	29.79%
12	4 Inch Commercial		1	192,833	330.00	429.77	99.77	30.23%	308.90	401.00	92.10	29.81%
13	6 inch Commercial											
14	Multi-Family 44	1"	1	160,250	605.08	786.62	181.55	30.00%	592.29	769.19	176.90	29.87%
15	Multi-Family 56	2"	1	117,917	647.92	841.99	194.06	29.95%	641.11	832.70	191.59	29.88%
16	Multi-Family 64	4"	1	208,583	845.31	1,098.84	253.53	29.99%	829.40	1,077.15	247.75	29.87%
17	Multi-Family 65	2"	1	161,083	786.44	1,022.10	235.67	29.97%	775.87	1,007.69	231.82	29.88%
18	Multi-Family 67	4"	1	305,250	1,008.32	1,311.09	302.78	30.03%	982.11	1,275.36	293.25	29.86%
19	Multi-Family 89	1"	1	256,000	1,127.14	1,465.06	337.92	29.98%	1,108.77	1,440.01	331.24	29.87%
20	Multi-Family 102	2"	1	134,167	1,065.68	1,384.49	318.81	29.92%	1,062.14	1,379.66	317.53	29.89%
21	Multi-Family 129	4"	1	170,500	1,348.93	1,752.49	403.56	29.92%	1,344.37	1,746.26	401.90	29.89%
22	Multi-Family 153	4"	1	192,000	1,585.38	2,059.62	474.24	29.91%	1,581.09	2,053.77	472.68	29.90%
23												
24												
25	Totals		1,138									
26												
27	Actuall Year End Number											
28	of Customers:		1,189									
29												

30 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Arizona American - Havasu Water
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size	Present Rates	Proposed Rates	Percent Change
1	Percentage Increase in Monthly Minimums			
2	Percentage Increase in Commodity Rates			
3				
4	**Monthly Usage Charge for:**			
5	Residential,Commercial, Irrigation, Resale and Miscellaneous Customers			
6	5/8 x 3/4 Inch	$ 10.00	$ 12.99	29.90%
7	1 Inch	17.10	22.23	30.00%
8	1 1/2 Inch	24.00	31.20	30.00%
9	2 Inch	33.60	43.68	30.00%
10	3 Inch	45.60	59.28	30.00%
11	4 Inch	57.60	74.88	30.00%
12	6 Inch	200.00	260.00	30.00%
13	8 Inch	400.00	520.00	30.00%
14				
15				
16	Multi-unit properties - multiple of 5/8 inch minimum charge.			
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31	Gallons In Minimum			
32	All, except Multi-unit	1,000	1,000	
33	Multi- unit - multiple of minimum			
34				
35				
36				
37	**Tier 1:** Gallons upper limit			
38	All, except Multi-unit	99,999,999	99,999,999	
39	Multi- unit - mutiple of tier			
40				
41				
42	(a) Rounded to nearest whole cent			
43				
44				
45				
46				
47				
48				

Arizona American - Havasu Water
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1					
2					
3	**Tier 2:** (Gallon upper limit, up to, but not exceeding)				
4	All, except Multi-unit		99,999,999	99,999,999	
5	Multi- unit - mutiple of tier				
6					
7					
8					
9					
10					
11					
12					
13					
14					
15	**Tier 3:** (Gallon over)				
16	All, except Multi-unit		99,999,999	99,999,999	
17	Multi- unit - mutiple of tier				
18					
19					
20					
21					
22					
23					
24					
25					
26					
27	Commodity Rates (per 1,000 gallons over minimum and per Tier)				
28	All, summer rate	Tier 1	$ 1.42	$ 1.85	30.28%
29	All, summer rate	Tier 2	1.42	1.85	30.28%
30	All, summer rate	Tier 3	1.42	1.85	30.28%
31	All, summer rate	Tier 4	1.42	1.85	30.28%
32					
33	All, winter rate	Tier 1	$ 1.31	$ 1.70	29.77%
34	All, winter rate	Tier 2	1.31	1.70	29.77%
35	All, winter rate	Tier 3	1.31	1.70	29.77%
36	All, winter rate	Tier 4	1.31	1.70	29.77%
37					
38	(a) Rounded to nearest whole cent				

Arizona American - Havasu Water
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates
1	Establishment & Reestablishment	$ 25.00	$ 25.00
2	Establishment (After Hours)	$ 35.00	$ 35.00
3	Reconnection (Deliquent)		
4	Reconnection (After Hours)		
5	Meter Test		
6	Deposit	**	**
7	Deposit Interest	**	**
8	Re-Establishment (With-in 12 Months)	***	***
9	Service Calls, Minimum Service Charge	$ 25.00	$ 25.00
10	Service Calls, Minimum Service Charge, After Hours	$ 35.00	$ 35.00
10	NSF Check	$ 10.00	$ 10.00
11	Deferred Payment, Per Month	(b)	(b)
12	Meter Re-Read	$ 5.00	5.00
13	Charge of Moving Customer Meter -		
14	Customer Requested	Cost	Cost
15	Late Payment Charge, 1.50% of balance		
16	Damages to Meter Locks, Valves, Seals	Cost	Cost (2)
17	Sprinklers	(a)	

18 (1) Greater of 1.50% or $5.00 Present Rates or 1.5% or $10.00 Proposed Rates.
19 (2) $40.00 plus actual cost of making repairs.
20 ** PER COMMISSION RULES (R14-2-403.B)
21 *** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)
22 IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM
23 ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE
24 TAX. PER COMMISSION RULE (14-2-409.D 5)
25 ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,
26 AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES,
OR, THE COMPANY MAY ELECT TO PAY THE INCOME TAXES, IF APPLICABLE.
27 (b) May include a service charge
28
29 Present Charges
30 Service Charges
31 Installation of Proposed

Meter Size	Ser. Line	Meter	Charges
5/8 x 3/4 Inch	$ 210.00	$ 65.00	$500
3 / 4 Inch	$ 210.00	$ 85.00	$575
1 Inch	$ 215.00	$ 110.00	$660
1 1/2 Inch	$ 225.00	$ 250.00	$900
2 Inch	$ 275.00	$ 375.00	$2,220
3 Inch	Cost	Cost	Cost
4 Inch	Cost	Cost	Cost
6 Inch	Cost	Cost	Cost
8 Inch	Cost	Cost	Cost
Meters Larger than 8"	Cost	Cost	Cost

42
43 As meters and service lines are now taxable income for income purposes, The Company
44 shall collect income taxes on the meter and service line charges.
45 Any tax collected will be refunded each year that the meter deposit is refunded.

MOHAVE
WATER DIVISION

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Present Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-1
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and **(1)** Revenue Annualizations	4,271,034	3,074,418		163,919	51,270	681,301	70,147	41,893	187,185	720	180
Private Fire **(a)**	14,394	14,394									
Misc. Revenue **(a)**	108,705	108,705									
Total Revenues	4,394,133	3,197,517	-	163,919	51,270	681,301	70,147	41,893	187,185	720	180
Operating Expenses **(b)**	1,935,809	1,570,064	-	45,324	9,349	182,818	16,909	57,942	39,136	10,642	3,626
Depreciation and Amortization **(b)**	670,933	515,764	-	14,916	2,833	71,770	6,029	32,972	17,821	6,569	2,259
Property Tax **(c)**	240,289	174,854	-	8,964	2,804	37,256	3,836	2,291	10,236	39	10
Income Tax **(d)**	492,378	286,598	-	33,929	13,451	137,266	15,538	(26,462)	42,646	(7,839)	(2,749)
Total Operating Expenses	3,339,409	2,547,279	-	103,132	28,437	429,110	42,312	66,743	109,839	9,411	3,146
Operating Income	1,054,723	650,238	-	60,787	22,833	252,191	27,835	(24,850)	77,346	(8,691)	(2,966)
Interest Expense **(e)**	272,115	194,706	-	6,859	1,453	34,013	3,138	17,209	9,563	3,768	1,404
Net Income	782,609	455,531	-	53,928	21,380	218,178	24,697	(42,059)	67,783	(12,459)	(4,370)
Rate Base **(f)**	9,649,461	6,904,482	-	243,233	51,513	1,206,145	111,290	610,265	339,125	133,625	49,783
Rate of Return **(g)**	10.93%	9.42%		24.99%	44.32%	20.91%	25.01%	-4.07%	22.81%	-6.50%	-5.96%

(1) Revenues are from Company's Present Rates Bill Count. Difference between Bill Count and General Ledger Revenues, included in 5/8" x 3/4" Customer Class.
(a) Private Fire and Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	1,274,987										
Percent of Taxable Income		58.21%	0.00%	6.89%	2.73%	27.88%	3.16%	-5.37%	8.66%	-1.59%	-0.56%
Income Tax		492,378	492,378	492,378	492,378	492,378	492,378	492,378	492,378	492,378	492,378
Allocated Income Tax		286,598	-	33,929	13,451	137,266	15,538	(26,462)	42,646	(7,839)	(2,749)
Income Tax											
Property Tax Allocation	240,289	72.77%	0.00%	3.73%	1.17%	15.50%	1.60%	0.95%	4.26%	0.02%	0.00%
Property Tax Allocation	240,289	174,854	-	8,963.76	2,803.67	37,256.40	3,835.93	2,290.88	10,236.08	39.37	9.84

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Proposed Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-2
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and **(1)**	3,594,690	2,508,732	-	141,486	46,615	617,387	64,052	37,068	178,579	619	151
Revenue Annualizations											
Private Fire **(a)**	12,172	12,172									
Misc. Revenue **(a)**	108,705	108,705									
Total Revenues	3,715,567	2,629,609	-	141,486	46,615	617,387	64,052	37,068	178,579	619	151
Operating Expenses **(b)**	1,935,809	1,570,064	-	45,324	9,349	182,818	16,909	57,942	39,136	10,642	3,626
Depreciation and Amortization **(b)**	670,933	515,764	-	14,916	2,833	71,770	6,029	32,972	17,821	6,569	2,259
Property Tax **(c)**	240,289	170,059	-	9,150	3,015	39,927	4,142	2,397	11,549	40	10
Income Tax **(d)**	228,081	68,458	-	24,948	11,459	110,464	12,939	(28,089)	38,437	(7,801)	(2,733)
Total Operating Expenses	3,075,112	2,324,346	-	94,337	26,656	404,979	40,019	65,222	106,943	9,449	3,161
Operating Income	640,455	305,263	-	47,149	19,959	212,408	24,034	(28,153)	71,637	(8,831)	(3,010)
Interest Expense **(e)**	272,115	194,706	-	6,859	1,453	34,013	3,138	17,209	9,563	3,768	1,404
Net Income	368,340	110,557	-	40,290	18,506	178,395	20,895	(45,363)	62,073	(12,599)	(4,414)
Rate Base **(f)**	9,649,461	6,904,482	-	243,233	51,513	1,206,145	111,290	610,265	339,125	133,625	49,783
Rate of Return **(g)**	6.64%	4.42%		19.38%	38.75%	17.61%	21.60%	-4.61%	21.12%	-6.61%	-6.05%
Percent of Total Customers		94.933%		1.635%	0.183%	2.464%	0.125%	0.484%	0.132%	0.037%	0.007%

(1) Revenues are from ACC Staff Proposed Rates Bill Count. Difference between Bill Count and General Ledger Revenues, included in 5/8" x 3/4" Customer Class.
(a) Private Fire and Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	596,421										
Percent of Taxable Income		30%	0%	11%	5%	48%	6%	-12%	17%	-3%	-1%
Income Tax		228,081	228,081	228,081	228,081	228,081	228,081	228,081	228,081	228,081	228,081
Allocated Income Tax		68,458	-	24,948	11,459	110,464	12,939	(28,089)	38,437	(7,801)	(2,733)
Percent of Revenues		70.77%	0.00%	3.81%	1.25%	16.62%	1.72%	1.00%	4.81%	0.02%	0.00%
Property Tax Allocation	240,289	170,059	-	9,150	3,015	39,927	4,142	2,397	11,549	40	10

Arizona American - Mohave Water
Test Year Ended December 31, 2000
Cost of Service Study Using Commodity / Demand Method
Allocation of Assets to Customer Classes Using ACC Staff Net Plant

Exhibit
Rebuttal Schedule G-3
Page 1
Witness: Kozoman

Line No.		Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
1	Plant, Minus Accumulated Depreciation, Advances and Contributions in Aid and Meter Deposits (from Schedule G-5, Page 1)											
2	Commodity	404,684	282,776	-	16,997	5,197	72,923	8,995	4,077	13,718	-	-
3	Demand	5,677,904	3,731,659	-	160,686	36,028	774,751	78,397	475,573	259,403	115,290	46,116
4	Customer	1,004,378	953,489	-	16,423	1,841	24,745	1,252	4,861	1,326	368	74
5	Service	1,338,116	1,227,516	-	24,121	2,904	50,701	3,405	19,213	7,692	2,137	427
6	Meter	1,224,378	709,041	-	25,007	5,542	283,025	19,241	106,541	56,987	15,830	3,166
7	Totals	9,649,461	6,904,482	-	243,233	51,513	1,206,145	111,290	610,265	339,125	133,625	49,783
8												
9												
10	Commodity	-	-	-	-	-	-	-	-	-	-	-
11	Demand	-	-	-	-	-	-	-	-	-	-	-
12	Customer											
13	Service											
14	Meter											
15	Totals	-	-	-	-	-	-	-	-	-	-	-
16												
17												
18				-	-	-	-	-	-	-		
19				-	-	-	-	-	-	-	-	-
20				-	-	-	-	-	-	-		
21				-	-	-	-	-	-	-	-	-
22												
23	Net Rate Base	9,649,461	6,904,482	-	243,233	51,513	1,206,145	111,290	610,265	339,125	133,625	49,783
24												
			ACC Staff Interest Expense									
	Interest Expense Allocation	272,115	194,706	-	6,859	1,453	34,013	3,138	17,209	9,563	3,768	1,404
	Ratio of rate bases to total rate base		71.5530%	0.0000%	2.5207%	0.5338%	12.4996%	1.1533%	6.3243%	3.5144%	1.3848%	0.5159%

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Customer Classes Using ACC Staff Expenses

Exhibit
Rebuttal Schedule G-4
Page 1
Witness: Kozoman

	Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Operation and Maintenance Expense (from Schedule G-6, Page 1)											
Commodity	322,558	225,390	-	13,547	4,143	58,125	7,170	3,250	10,934	-	-
Demand	368,778	242,370	-	10,437	2,340	50,320	5,092	30,888	16,848	7,488	2,995
Customer	947,455	899,450	-	15,492	1,737	23,343	1,181	4,585	1,250	347	69
Service	91,204	83,666	-	1,644	198	3,456	232	1,310	524	146	29
Meter	205,813	119,187	-	4,204	932	47,575	3,234	17,909	9,579	2,661	532
Totals	1,935,809	1,570,064	-	45,324	9,349	182,818	16,909	57,942	39,136	10,642	3,626
Depreciaton Expense on Plant (from Schedule G-6, Page 2)											
Commodity	16,350	11,425	-	687	210	2,946	363	165	554	-	-
Demand	232,746	152,966	-	6,587	1,477	31,758	3,214	19,494	10,633	4,726	1,890
Customer	147,696	140,212	-	2,415	271	3,639	184	715	195	54	11
Service	154,933	142,127	-	2,793	336	5,870	394	2,225	891	247	49
Meter	119,209	69,034	-	2,435	540	27,556	1,873	10,373	5,548	1,541	308
Totals	670,933	515,764	-	14,916	2,833	71,770	6,029	32,972	17,821	6,569	2,259
Total Expenses (excluding Income Tax and Property Taxes)	2,606,742	2,085,828	-	60,240	12,182	254,588	22,938	90,914	56,957	17,211	5,885

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Rate Base by Function Using ACC Staff Plant and Accumulated Depreciation

Exhibit
Rebuttal Schedule G-5
Page 1
Witness: Kozoman

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Rate Base							
Plant minus (Accumulated Depreciation Contributions in Aid of Construction Advances in Aid of Construction and Meter Deposits)	9,649,461	5,677,904	404,684	1,004,378	1,224,378	1,338,116	9,649,461
	9,649,461	5,677,904	404,684	1,004,378	1,224,378	1,338,116	9,649,461

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Allocation of Property Taxes to Functions							
Revenue Requirement by Function	3,710,045	1,186,160	401,079	1,267,042	464,618	391,146	3,710,045
						-	-
Total Revenue Requirement	3,710,045	1,186,160	401,079	1,267,042	464,618	391,146	3,710,045
Property Taxes Allocation	240,289	76,824	25,977	82,063	30,092	25,333	240,289

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of
Construction and Meter Deposits Using ACC Staff Plant and Accumulated Depreciation to Functions

Exhibit
Rebuttal Schedule G-5
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accum. Depr. Adjustments. (Adj. 2)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible												
301.00	Organization	34,004	-		34,004	-	34,004	34,004					34,004
302.00	Franchises	37,061	-		37,061	-	37,061	37,061					37,061
303.00	Miscellaneous Intangibles	-	-		-	-	-	-					-
Total Intangible Plant		71,065	-		71,065	-	71,065						-
		0											-
	Source of Supply	0											-
310.00	Land and Land Rights	209,048	-		209,048	0	209,048	209,048					209,048
311.00	Structures and Improvements	770,946	87,695		683,251	5,480	677,771	677,771					677,771
312.00	Collecting and Impounding Res.	663,944	76,625		587,319	8,429	578,891	578,891					578,891
313.00	Lakes, Rivers, Other Intakes	-	-		-	-	-	-	-				-
314.00	Wells and Springs	754,209	280,623	(26,693)	500,279	10,678	489,601	440,641	48,960				489,601
Total Source of Supply Plant		2,398,147	444,942	(26,693)	1,979,898	24,587	1,955,311						-
		0											-
	Pumping	0											-
320.00	Land and Land Rights	2,361	-		2,361	-	2,361	2,361					2,361
321.00	Structures and Improvements	1,687	(2,645)		4,332	20	4,312	3,881	431				4,312
323.00	Other Power Production	-	-		-	-	-	-	-				-
325.00	Electric Pumping Equipment	1,854,623	911,974		942,649	43,719	898,930	809,037	89,893				898,930
326.00	Diesel Pumping Equipment	-	-		-	-	-	-	-				-
328.10	Gas Engine Pumping Equipment	-	-		-	-	-	-	-				-
Total Pumping Plant		1,858,671	909,329	-	949,342	43,739	905,603						-
		0											-
	Water Treatment	0											-
330.00	Land and Land Rights	396,801	-		396,801	-	396,801	396,801					396,801
331.00	Structures and Improvements	15,157	-		15,157	7,145	8,012	7,211	801				8,012
332.00	Water Treatment Equipment	50,870	50,941		(71)	(4,005)	3,935	3,541	393				3,935
Total Water Treatment Plant		462,828	50,941	-	411,887	3,140	408,747						-
		0											-
	Transmission and Distribution	0											-
340.00	Land and Land Rights	9,609	-		9,609	-	9,609	9,609					9,609
341.00	Structures and Improvements	4,583	1,999		2,584	41	2,543	2,288	254				2,543
342.00	Distribution, Reservoirs, & ST	1,093,508	241,857	(49,444)	901,095	10,761	890,334	801,301	89,033				890,334
343.00	Transmission and Distribution	11,661,493	3,472,215		8,189,278	152,117	8,037,161	7,233,445	803,716				8,037,161
344.00	Fire Mains	-	-		-	-	-						-
345.00	Services	2,863,818	1,340,557		1,523,261	77,433	1,445,827					1,445,827	1,445,827
346.00	Meters	1,825,558	541,600		1,283,958	59,580	1,224,378				1,224,378		1,224,378
348.00	Hydrants	-	-		-	-	-			-			-
349.00	Other Transmission & Distribution	-	-		-	-	-	-	-				-
Total Transmission and Distribution Plant		17,458,569	5,598,228	(49,444)	11,909,784	299,932	11,609,853						

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of Construction and Meter Deposits

Exhibit
Rebuttal Schedule G-5
Page 2a
Witness: Kozoman

		ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accumulated Depr. Adj. (Adj. 2)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
ALLOCATED COMMON PLANT													
Maricopa Common Plant													
389.00	Land and Land Rights	293	-		293	-	293	293					293
390.00	Structures and Improvements	28,709	58,920	(17,226)	(12,985)	(23,920)	10,935	10,935					10,935
391.00	Office Funiture and Equipment	301,146	9,438		291,708	2,601	289,106			289,106			289,106
391.10	Computer Equipment	353,433	(85,822)		439,255	6,387	432,868			432,868			432,868
392.00	Transportation Equipment	546,135	285,102		261,033	63,379	197,654	49,414		148,241			197,654
393.00	Stores Equipment	2,865	1,896		969	63	906			906			906
394.00	Tools, Shop and Garage	119,563	75,310		44,253	4,726	39,527			39,527			39,527
395.00	Laboratory Equipment	7,277	5,191		2,086	126	1,961			1,961			1,961
396.00	Power Operated Equipment	71,294	47,856		23,438	3,289	20,149	5,037		15,112			20,149
397.00	Communication Equipment	113,610	13,895		99,715	1,622	98,093	24,523		73,570			98,093
398.00	Miscellaneous Equipment	10,836	7,388		3,448	360	3,088			3,088			3,088
Total Common Plant		1,555,161	419,174	(17,226)	1,153,213	58,633	1,094,580						
							-	-					-
							-	-					-
	TOTAL WATER PLANT	23,804,441	7,422,614	(93,363)	16,475,190	430,031	16,045,159	11,337,092	1,033,483	1,004,378	1,224,378	1,445,827	16,045,159
Total Plant		23,804,441			16,475,190								
	Adjustments to Accumulated Depreciation												
Company's additional Accumulated Depreciation Adjustment			430,031		(430,031)								-
			7,852,645										
	Total Net Plant				16,045,159								
	Advances in Aid of Construction				3,462,178		(3,462,178)	(3,115,960)	(346,218)				(3,462,178)
	Contributions in Aid of Construction				2,825,809		(2,825,809)	(2,543,228)	(282,581)				(2,825,809)
	Customer Meter Deposits				107,711		(107,711)					(107,711)	(107,711)
	Total Rate Base				9,649,461		9,649,461	5,677,904	404,684	1,004,378	1,224,378	1,338,116	9,649,461

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of ACC Staff Expenses to Functions

Exhibit
Rebuttal Schedule G-6
Page 1
Witness: Kozoman

		ACC Staff Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Salaries and Wages	(a)	614,283	141,127	15,681	382,548	74,927	-	614,283
Purchased Water		5,040		5,040				5,040
Purchased Power		294,679		294,679				294,679
Chemicals		(18,136)		(18,136)				(18,136)
Repairs and Maintenance	(b)	301,313	121,854	13,539	-	74,716	91,204	301,313
Office Supplies and Expense		120,364			120,364			120,364
Outside Services		40,219			40,219			40,219
Service Company Charges		-	-	-	-	-	-	-
Water Testing		-		-				-
Rents		18,307			18,307			18,307
Transportation Expenses		-			-			-
Insurance - General Liability		70,223			70,223			70,223
Insurance - Health and Life		-	-		-			-
Regulatory Commission Expense - Rate Case		29,013			29,013			29,013
Miscellaneous Expense		422,562	97,080	10,787	263,153	51,542	-	422,562
Depreciation Expense, Allocated on Rebuttal Schedule G-6, Page 2								-
Taxes Other Than Income		37,941	8,717	969	23,628	4,628	-	37,941
Property Taxes, Allocated on Rebuttal Schedules G-1 & G-2				-	-			-
Income Tax, Allocated on Rebuttal Schedules G-1 & G-2								
		1,935,809	368,778	322,558	947,455	205,813	91,204	1,935,809

(a) Labor (Wages and Salaries) factor computations shown on Rebuttal Schedule G-7, Page 2a
(b) Repairs and Maintenance allocation factors computation shown on Rebuttal Schedule G-7, Page 2a

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciatio Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible										-
301.00	Organization	34,004		-							-
302.00	Franchises	37,061		-							-
303.00	Miscellaneous Intangibles	-		-							-
	Subtotal Intangible	71,065		-							-
											-
	Source of Supply										-
310.00	Land and Land Rights	209,048		-							-
311.00	Structures and Improvements	770,946	2.830%	21,818	21,818	21,818					21,818
312.00	Collecting and Impounding Res.	663,944	2.540%	16,864	16,864	16,864					16,864
313.00	Lakes, Rivers, Other Intakes	-		-	-						-
314.00	Wells and Springs	754,209	2.700%	20,364	20,364	18,327	2,036				20,364
	Subtotal Source of Supply	2,398,147		59,046							-
											-
	Pumping										-
320.00	Land and Land Rights	2,361		-	-						-
321.00	Structures and Improvements	1,687	2.390%	40	40	36	4				40
323.00	Other Power Production	-		-	-	-	-				-
325.00	Electric Pumping Equipment	1,854,623	5.120%	94,957	94,957	85,461	9,496				94,957
326.00	Diesel Pumping Equipment	-		-	-	-	-				-
328.10	Gas Engine Pumping Equipment	-		-	-	-	-				-
	Subtotal Pumping	1,858,671		94,997							-
											-
	Water Treatment										-
330.00	Land and Land Rights	396,801		-	-						-
331.00	Structures and Improvements	15,157	2.500%	379	379	341	38				379
332.00	Water Treatment Equipment	50,870	12.000%	6,104	6,104	5,494	610				6,104
	Subtotal Water Treatment	462,828		6,483							-
											-
	Transmission and Distribution										-
340.00	Land and Land Rights	9,609		-	-						-
341.00	Structures and Improvements	4,583	1.810%	83	83	75	8				83
342.00	Distribution, Reservoirs, & ST	1,093,508	1.810%	19,792	19,792	17,813	1,979				19,792
343.00	Transmission and Distribution	11,661,493	2.610%	304,365	304,365	273,928	30,436				304,365
344.00	Fire Mains	-		-	-						-
345.00	Services	2,863,818	5.410%	154,933	154,933					154,933	154,933
346.00	Meters	1,825,558	6.530%	119,209	119,209				119,209		119,209
348.00	Hydrants	-		-	-			-			-
349.00	Other Transmission & Distribution	-		-	-	-	-				-
	Subtotal Transmission and Distribution	17,458,569		598,382							

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2a
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciation Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	General										
389.00	Land and Land Rights	293		-							-
390.00	Structures and Improvements	28,709	2.030%	583	583	583					583
391.00	Office Funiture and Equipment	301,146	4.099%	12,342	12,342			12,342			12,342
391.10	Computer Equipment	353,433	4.099%	14,485	14,485			14,485			14,485
392.00	Transportation Equipment	546,135	25.000%	136,534	136,534	34,133		102,400			136,534
393.00	Stores Equipment	2,865	3.930%	113	113			113			113
394.00	Tools, Shop and Garage	119,563	7.552%	9,029	9,029			9,029			9,029
395.00	Laboratory Equipment	7,277	3.064%	223	223			223			223
396.00	Power Operated Equipment	71,294	9.230%	6,581	6,581	1,645		4,935			6,581
397.00	Communication Equipment	113,610	4.104%	4,662	4,662	1,166		3,497			4,662
398.00	Miscellaneous Equipment	10,836	6.190%	671	671			671			671
	Subtotal General	1,555,161		185,222				-			
								-			-
					-	-					-
	Subtotals	23,804,441		944,130							-
				-							
				-							
						-					-
						-					-
	Amortization of Deferred Regulatory Asset	234,640	3.999%	9,384	9,384	9,384					9,384
	Less: Amotization of Contributions	2,825,809	10.00%	(282,581)	(282,581)	(254,323)	(28,258)				(282,581)
	Total Depreciation Expense			670,933	670,933	232,746	16,350	147,696	119,209	154,933	670,933

Arizona American - Mohave Water
Test Year Ended December 31, 2001
SUMMARY OF COMMODITY - DEMAND METHOD FUNCTION FACTORS

Exhibit
Rebuttal Schedule G-7
Page 1
Witness: Kozoman

Line No.	Description	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Totals
3	Commodity	69.876%	0.000%	4.200%	1.284%	18.020%	2.223%	1.008%	3.390%	0.000%	0.00%	100.00%
4	Demand	65.722%	0.000%	2.830%	0.635%	13.645%	1.381%	8.376%	4.569%	2.031%	0.81%	100.00%
5	Customer	94.933%	0.000%	1.635%	0.183%	2.464%	0.125%	0.484%	0.132%	0.037%	0.01%	100.00%
6	Services	91.735%	0.000%	1.803%	0.217%	3.789%	0.254%	1.436%	0.575%	0.160%	0.03%	100.00%
7	Meters	57.910%	0.000%	2.042%	0.453%	23.116%	1.571%	8.702%	4.654%	1.293%	0.26%	100.00%

Arizona American - Mohave Water
Test Year Ended December 31, 2001
COMMODITY - DEMAND METHOD FUNCTION FACTORS
Plant and Depreciation Expense Allocations

Exhibit
Rebuttal Schedule G-7
Page 2
Witness: Kozoman

Line No.	Description	Total	Demand	Commodity	Customer
1					
2					
3	Wells	1.00	0.90	0.10	
4	Pumps & Equipment	1.00	0.90	0.10	
5	Distribution Mains	1.00	0.90	0.10	
6	Customer	1.00			1.00
7	Services	1.00			1.00
8	Meters	1.00			1.00
9	Fire Hydrants	1.00			1.00
10	Transportation Equip.	1.00	0.25		0.75
11	Office Furniture	1.00			1.00
12	Communication Equip.	1.00	0.25		0.75
13					
14					
15	**To Approximately Match ACC Staff Proposed Rates for 5/8 Inch Meter**				
16	Demand and Commodity Allocation to Wells, Pumps and Equipment and				
17	Distribution Mains would need to be changed to approximately match				
18	ACC Staff's proposed monthly minimums and commodity rates. The				
19	match would be ACC Staff's Proposed Rates to Computed Monthly				
20	Minimum and Commodity rate WITHOUT Equity returns and				
21	Income Taxes. Match would be based on cost only.				
22					
23		**Required Allocations:**			
24	Description	Total	Demand	Commodity	Customer
25	Wells	1.00	-1.15	2.15	
26	Pumps & Equipment	1.00	-1.15	2.15	
27	Distribution Mains	1.00	-1.15	2.15	
28					
29					
30					
31					
32					

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 2a
Witness: Kozoman

Labor Allocation Factors	
Pumping Labor	25.53%
Meter Labor	12.20%
Customer Labor	62.28%
	100.00%

Repairs and Maintenance Allocation Factors	
Repairs and Maintenance Demand	1.49%
Repairs and Maintenance Pumping	13.56%
Repairs and Maintenance Mains	29.88%
Repairs and Maintenance Services	30.27%
Repairs and Maintenance Meters	24.80%
Repairs and Maintenance Customer	0.00%
	100.00%

Computations shown on this work sheet are from page labeled asTrial Balance in this work book. Allocation percentage were computed based on Expenses charged by Citizens Utilities and are then applied to proforma amounts.

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF CLASS ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 3
Witness: Kozoman

COMMODITY ALLOCATION FACTOR

Meter Size	(a) Total Gallons (in 1,000's) In Test Year	Percent of Total
5/8" x 3/4"	1,234,371	69.88%
3/4"	-	0.00%
1"	74,193	4.20%
1-1/2"	22,688	1.28%
2"	318,324	18.02%
3"	39,264	2.22%
4"	17,799	1.01%
6"	59,880	3.39%
8"	-	0.000%
10"	-	0.000%
Totals	1,766,520	100.00%

DEMAND ALLOCATION FACTOR

Meter Size	(a) Number of Meters and/or Services	Equiv-alent Weight	Equivalent Number of Meters and/or Services	Percent of Total
5/8" x 3/4	12,947	1.0	12,947	65.72%
3/4"	-	1.5	0	0.00%
1"	223	2.5	558	2.83%
1-1/2"	25	5.0	125	0.63%
2"	336	8.0	2,688	13.65%
3"	17	16.0	272	1.38%
4"	66	25.0	1,650	8.38%
6"	18	50.0	900	4.57%
8"	5	80.0	400	2.03%
10"	1	160.0	160	0.81%
Totals	13,638		19,700	100.00%

CUSTOMER ALLOCATION FACTOR

Meter Size	Number of Meters	Percent of Total
5/8" x 3/4"	12,947	94.93%
3/4"	0	0.00%
1"	223	1.64%
1-1/2"	25	0.18%
2"	336	2.46%
3"	17	0.12%
4"	66	0.48%
6"	18	0.13%
8"	5	0.04%
10"	1	0.01%
Totals	13,638	100.00%

SERVICES ALLOCATION FACTOR (b)

Meter Size	Number of Services	Install-ation Cost	Weighted Number Services	Percent of Total
5/8" x 3/4	12,947	$ 355.00	4,596,185	91.73%
3/4"	0	355.00	0	0.00%
1"	223	405.00	90,315	1.80%
1-1/2"	25	435.00	10,875	0.22%
2"	336	565.00	189,840	3.79%
3"	17	750.00	12,750	0.25%
4"	66	1,090.00	71,940	1.44%
6"	18	1,600.00	28,800	0.57%
8"	5	1,600.00	8,000	0.16%
10"	1	1,600.00	1,600	0.03%
Totals	13,638		5,010,305	100.00%

METER ALLOCATION FACTOR (b)

Meter Size	Number of Meters	Meter Cost	Weighted Dollars of Meters	Percent of Total
5/8" x 3/4"	12,947	$ 105.00	1,359,435	57.91%
3/4"	0	105.00	0	0.00%
1"	223	215.00	47,945	2.04%
1-1/2"	25	425.00	10,625	0.45%
2"	336	1,615.00	542,640	23.12%
3"	17	2,170.00	36,890	1.57%
4"	66	3,095.00	204,270	8.70%
6"	18	6,070.00	109,260	4.65%
8"	5	6,070.00	30,350	1.29%
10"	1	6,070.00	6,070	0.26%
Totals	13,638		2,347,485	100.00%

(a) Includes customer and gallon sold annualization

(b) Meter and Service Line cost from Arizona Corporation Commission Memo of April 23, 2002 from Marlin Scott, Jr.. Meter costs based on compound meters. Cost of service line and

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Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Including Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	1,004,378	1,338,116	1,224,378	3,566,872
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	28,323	37,735	34,527	100,586
4	Rate Bases	1,004,378	1,338,116	1,224,378	3,566,872
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	37,765	50,313	46,037	134,114
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	61,505	81,942	74,977	218,423
9					
10	Revenue Requirement for Debt Component, from Line 3	28,323	37,735	34,527	100,586
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	61,505	81,942	74,977	218,423
13	Total Return Requirement with Income Tax	89,828	119,676	109,504	319,009
14					
15	Property Tax Expense, from Schedule G-5, Page 1	82,063	25,333	30,092	137,488
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	947,455	91,204	205,813	1,244,472
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	147,696	154,933	119,209	421,837
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	1,267,042	391,146	464,618	2,122,806
19					
20	**Customer Charge**				
21	Number of Bills = 13,638 times 12	163,656			
22					
23	**Charge per Bill**	$ 7.74			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 19,700 times 12		236,394	236,394	
28					
29	**Charge per Equivalent Meter**		$ 1.65	$ 1.97	
30					
31					
32	CUSTOMER CHARGE:				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge)				
34	Charge per Bill (Customer Charge with Equity Return and Income Tax)	$ 7.74			
35	Charge per Equivalent Meter (For Service Line Charge with Equity Return and Income Tax)	1.65			
36	Charge per Equivalent Meter (For Meter Charge with Equity Return and Income Tax)	1.97			
37	(Service and Meter Revenue Requirement divided by Annual Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter	$ 11.36			
39					

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Excluding Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1a
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	1,004,378	1,338,116	1,224,378	3,566,872
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	28,323	37,735	34,527	100,586
4	Rate Bases	1,004,378	1,338,116	1,224,378	3,566,872
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	0.00%	0.00%	0.00%	0.00%
6	Required Operating Income for Equity	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-
9					
10	Revenue Requirement for Debt Component, from Line 3	28,323	37,735	34,527	100,586
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	-	-	-	-
13	Total Return Requirement with Income Tax	28,323	37,735	34,527	100,586
14					
15	Property Tax Expense, from Schedule G-5, Page 1	82,063	25,333	30,092	137,488
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	947,455	91,204	205,813	1,244,472
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	147,696	154,933	119,209	421,837
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	1,205,537	309,205	389,641	1,904,383
19					
20	**Customer Charge**				
21	Number of Bills = 13,638 times 12	163,656			
22					
23	**Charge per Bill**	$ 7.37			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 19,700 times 12		236,394	236,394	
28					
29	**Charge per Equivalent Meter**		$ 1.31	$ 1.65	
30	**Actual Cost (without Equity Return or Income Taxes)**				
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge, nor recovery of return or income tax)				
34	Charge per Bill (Customer Charge without Equity Return or Income Tax)	$ 7.37			
35	Charge per Equivalent Meter (For Service Line Charge without Equity Return or Income Tax)	1.31			
36	Charge per Equivalent Meter (For Meter Charge without Equity Return or Income Tax)	1.65			
37	(Service and Meter Revenue Requirement divided by Annualized Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter without recovery of Equity Return or Income Tax	$ 10.32			

Arizona American - Mohave Water
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Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Including Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	5,677,904
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	160,117
5	Rate Base	5,677,904
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%
7	Required Operating Income for Equity	213,489
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	347,695
10		
11	Revenue Requirement for Debt Component, from Line 4	160,117
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	347,695
14		
15	Property Tax Expense, from Schedule G-5, Page 1	76,824
16	Demand Expenses, from Schedule G-6, Page 1	368,778
17	Depreciation, from Schedule G-6, Page 2	232,746
18	Totals	1,186,160
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	236,394
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 5.02
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 5.02	1.0	$ 5.02
26	3/4 Inch Meter	$ 5.02	1.5	7.53
27	1 Inch Meter	$ 5.02	2.5	12.54
28	1 1/2 Inch Meter	$ 5.02	5.0	25.09
29	2 Inch Meter	$ 5.02	8.0	40.14
30	3 Inch Meter	$ 5.02	15.0	75.27
31	4 Inch Meter	$ 5.02	25.0	125.44
32	6 Inch Meter	$ 5.02	50.0	250.89
33	8 Inch Meter	$ 5.02	80.0	401.42
34	10 Inch Meter	$ 5.02	160.0	802.84

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Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Excluding Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2a
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	5,677,904
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	160,117
5	Rate Base	5,677,904
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	
7	Required Operating Income for Equity	-
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	-
10		
11	Revenue Requirement for Debt Component, from Line 4	160,117
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	-
14		
15	Property Tax Expense, from Schedule G-5, Page 1	76,824
16	Demand Expenses, from Schedule G-6, Page 1	368,778
17	Depreciation, from Schedule G-6, Page 2	232,746
18	Totals	838,465
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	236,394
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 3.55
22		$ 2.87

Line No.		5/8" Demand Charge	Meter Ratio	Demand Charge
23				
24	Demand Charge Per Equivalent			
25	5/8 x 3/4 Inch Meter	$ 3.55	1.0	$ 3.55
26	3/4 Inch Meter	$ 3.55	1.5	5.32
27	1 Inch Meter	$ 3.55	2.5	8.87
28	1 1/2 Inch Meter	$ 3.55	5.0	17.73
29	2 Inch Meter	$ 3.55	8.0	28.38
30	3 Inch Meter	$ 3.55	15.0	53.20
31	4 Inch Meter	$ 3.55	25.0	88.67
32	6 Inch Meter	$ 3.55	50.0	177.34
33	8 Inch Meter	$ 3.55	80.0	283.75
34	10 Inch Meter	$ 3.55	160.0	567.50

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including and Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 3
Witness: Kozoman

Including Equity Return and Income Taxes

Line No.		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended onthly Mininum to ComputedCost
1	5/8 x 3/4 Inch Meter	$ 7.74	$ 1.65	$ 1.97	$ 5.02	$ 16.38	$ 7.27	44.38%
2	3/4 Inch Meter	7.74	2.48	2.95	7.53	20.70	$ 7.27	35.12%
3	1 Inch Meter	7.74	4.14	4.91	12.54	29.34	$ 12.61	42.98%
4	1 1/2 Inch Meter	7.74	8.27	9.83	25.09	50.93	$ 21.01	41.24%
5	2 Inch Meter	7.74	13.24	15.72	40.14	76.84	$ 25.21	32.81%
6	3 Inch Meter	7.74	24.82	29.48	75.27	137.31	$ 50.41	36.72%
7	4 Inch Meter	7.74	41.37	49.14	125.44	223.69	$ 75.62	33.81%
8	6 Inch Meter	7.74	82.73	98.27	250.89	439.63	$ 168.05	38.22%
9	8 Inch Meter	7.74	132.37	235.85	401.42	777.38	$ 336.10	43.23%
10	10 Inch Meter	7.74	397.11	786.18	802.84	1,993.87	$ 581.23	29.15%
11								
12								
13								
14	**Excluding Equity Return and Income Taxes**							
15								
16								
17								
18								
19								
20								
21		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended onthly Mininum to ComputedCost
22								
23	5/8 x 3/4 Inch Meter	$ 7.37	$ 1.31	$ 1.65	$ 2.87	$ 13.19	$ 7.27	55.11%
24	3/4 Inch Meter	7.37	1.96	2.47	4.30	16.11	7.27	45.14%
25	1 Inch Meter	7.37	3.27	4.12	7.17	21.93	12.61	57.50%
26	1 1/2 Inch Meter	7.37	6.54	8.24	14.35	36.50	21.01	57.56%
27	2 Inch Meter	7.37	10.46	13.19	22.96	53.97	25.21	46.71%
28	3 Inch Meter	7.37	19.62	24.72	43.04	94.75	50.41	53.21%
29	4 Inch Meter	7.37	32.70	41.21	71.74	153.01	75.62	49.42%
30	6 Inch Meter	7.37	65.40	82.41	143.48	298.66	168.05	56.27%
31	8 Inch Meter	7.37	104.64	131.86	229.57	473.43	336.10	70.99%
32	10 Inch Meter	7.37	209.28	263.72	459.13	939.50	581.23	61.87%

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 4
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	404,684	1,004,378	1,338,116	1,224,378	5,677,904	9,649,461
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.820%	2.820%	2.820%	2.820%	2.820%	2.820%
3	Required Operating Income - for Debt	11,412	28,323	37,735	34,527	160,117	272,115
4	Rate Bases from Schedule G-5, Page 1	404,684	1,004,378	1,338,116	1,224,378	5,677,904	9,649,461
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	15,216	37,765	50,313	46,037	213,489	362,820
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	24,781	61,505	81,942	74,977	347,695	590,899
9							
10	Revenue Requirement for Debt Component, from Line 3	11,412	28,323	37,735	34,527	160,117	272,115
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	24,781	61,505	81,942	74,977	347,695	590,899
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	36,194	89,828	119,676	109,504	507,812	863,014
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	25,977	82,063	25,333	30,092	76,824	240,289
16	Expenses (From Sch. G-6. Page 1)	322,558	947,455	91,204	205,813	368,778	1,935,809
17	Depreciation and Amortization (From Schedule G-6, Page 2)	16,350	147,696	154,933	119,209	232,746	670,933
18	Total Revenue Requirement by function	401,079	1,267,042	391,146	464,618	1,186,160	3,710,045
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	1,766,520	163,656	236,394	236,394	236,394	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.2270					
22	(Line 18 divided by Line 20)		$ 7.74	$ 1.65	$ 1.97	$ 5.02	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 16.38	
24							

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses and Return

Exhibit
Schedule G-8
Page 4a
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	404,684	1,004,378	1,338,116	1,224,378	5,677,904	9,649,461
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	11,412	28,323	37,735	34,527	160,117	272,115
4	Rate Bases from Schedule G-5, Page 1	404,684	1,004,378	1,338,116	1,224,378	5,677,904	9,649,461
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)						
6	Required Operating Income for Equity	-	-	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	-	-	-	-	-	-
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-	-	-
9							
10	Revenue Requirement for Debt Component, from Line 3	11,412	28,323	37,735	34,527	160,117	272,115
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	-	-	-	-	-	-
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	11,412	28,323	37,735	34,527	160,117	272,115
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	25,977	82,063	25,333	30,092	76,824	240,289
16	Expenses (From Sch. G-6. Page 1)	322,558	947,455	91,204	205,813	368,778	1,935,809
17	Depreciation and Amortization (From Schedule G-6, Page 2)	16,350	147,696	154,933	119,209	232,746	670,933
18	Total Revenue Requirement by function	376,298	1,205,537	309,205	389,641	838,465	3,119,146
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	1,766,520	163,656	236,394	236,394	236,394	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.2130					
22	(Line 18 divided by Line 20)		$ 7.3663	$ 1.3080	$ 1.6483	$ 3.5469	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)						$ 13.87

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **without** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 1
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4a	$ 0.2130
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	$ 3.55
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	7.37
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	1.31
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	1.65
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4a	$ 13.87

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 7.27
Proposed Commodity Rate			
0	to	4,000	$ 0.81
4,001	to	100,000	$ 1.23
Over 100,001			$ 1.47

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4)
	Computed Costs, without Equity Return or Income Taxes									Recovery of Expenses or, (Lack of Recovery)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	
22	-	$ 13.87	-	$ 13.87		-	$ 7.27		$ 7.27	$ (6.60)
23	1,000	$ 13.87	$ 0.2130	$ 14.08		1,000	7.27	$ 0.81	8.08	(6.00)
24	2,000	13.87	0.43	14.30		2,000	7.27	1.62	8.89	(5.41)
25	3,000	13.87	0.64	14.51		3,000	7.27	2.43	9.70	(4.81)
26	4,000	13.87	0.85	14.72		4,000	7.27	3.24	10.51	(4.21)
27	5,000	13.87	1.07	14.93		5,000	7.27	4.47	11.74	(3.19)
28	6,000	13.87	1.28	15.15		6,000	7.27	5.70	12.97	(2.18)
29	7,000	13.87	1.49	15.36		7,000	7.27	6.93	14.20	(1.16)
30	8,000	13.87	1.70	15.57	**Usage**	8,000	7.27	8.16	15.43	(0.14)
31	**8,145**	13.87	1.74	15.60	**<-Level->**	**8,145**	7.27	8.34	15.61	0.00
32	9,000	13.87	1.92	15.79	**When**	9,000	7.27	9.39	16.66	0.87
33	10,000	13.87	2.13	16.00	**Revenues**	10,000	7.27	10.62	17.89	1.89
34	11,000	13.87	2.34	16.21	**Equal**	11,000	7.27	11.85	19.12	2.91
35	12,000	13.87	2.56	16.43	**Expenses**	12,000	7.27	13.08	20.35	3.92
36	13,000	13.87	2.77	16.64	**(No Rate**	13,000	7.27	14.31	21.58	4.94
37	14,000	13.87	2.98	16.85	**of Return**	14,000	7.27	15.54	22.81	5.96
38	15,000	13.87	3.20	17.06	**on**	15,000	7.27	16.77	24.04	6.98
39	16,000	13.87	3.41	17.28	**Equity**	16,000	7.27	18.00	25.27	7.99
40	17,000	13.87	3.62	17.49	**or Income**	17,000	7.27	19.23	26.50	9.01
41	18,000	13.87	3.83	17.70	**Taxes**	18,000	7.27	20.46	27.73	10.03
42	19,000	13.87	4.05	17.92	**Included)**	19,000	7.27	21.69	28.96	11.04
43	20,000	13.87	4.26	18.13		20,000	7.27	22.92	30.19	12.06
44	21,000	13.87	4.47	18.34		21,000	7.27	24.15	31.42	13.08
45	22,000	13.87	4.69	18.56		22,000	7.27	25.38	32.65	14.09
46	23,000	13.87	4.90	18.77		23,000	7.27	26.61	33.88	15.11
47	24,000	13.87	5.11	18.98		24,000	7.27	27.84	35.11	16.13
48	25,000	13.87	5.33	19.19		25,000	7.27	29.07	36.34	17.15
49	26,000	13.87	5.54	19.41		26,000	7.27	30.30	37.57	18.16
50	27,000	13.87	5.75	19.62		27,000	7.27	31.53	38.80	19.18
51	28,000	13.87	5.96	19.83		28,000	7.27	32.76	40.03	20.20
52	29,000	13.87	6.18	20.05		29,000	7.27	33.99	41.26	21.21
53	30,000	13.87	6.39	20.26		30,000	7.27	35.22	42.49	22.23
53	**Average Usage**					**Average Usage**				
54	8,787	13.87	1.87	15.74		8,787	7.27	9.13	16.40	**0.66**

Arizona American - Mohave Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **with** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 2
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4	$0.2270
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	$ 5.02
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	7.74
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	1.97
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	1.65
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4	$ 16.38

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 7.27
Proposed Commodity Rate			
0	to	4,000	$ 0.81
4,001	to	100,000	$ 1.23
Over 100,001			$ 1.47

Computed Costs, with Equity Return and Income Taxes

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7)	Col. 9 (Col. 8-4)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	Recovery of Expenses Rate of Return & Income Tax or (Lack of Recovery)
24	-	$ 16.38	-	$ 16.38		-	$ 7.27		$ 7.27	$ (9.11)
25	1,000	$ 16.38	$0.2270	$ 16.61		1,000	7.27	$ 0.81	8.08	(8.53)
26	2,000	16.38	0.45	16.83		2,000	7.27	1.62	8.89	(7.94)
27	3,000	16.38	0.68	17.06		3,000	7.27	2.43	9.70	(7.36)
28	4,000	16.38	0.91	17.29		4,000	7.27	3.24	10.51	(6.78)
29	5,000	16.38	1.14	17.52		5,000	7.27	4.47	11.74	(5.78)
30	6,000	16.38	1.36	17.74		6,000	7.27	5.70	12.97	(4.77)
31	7,000	16.38	1.59	17.97		7,000	7.27	6.93	14.20	(3.77)
32	8,000	16.38	1.82	18.20		8,000	7.27	8.16	15.43	(2.77)
33	9,000	16.38	2.04	18.42		9,000	7.27	9.39	16.66	(1.76)
34	10,000	16.38	2.27	18.65	**Usage**	10,000	7.27	10.62	17.89	(0.76)
35	**10,760**	16.38	2.44	18.82	**<-Level->**	**10,760**	7.27	11.55	18.82	0.00
36	11,000	16.38	2.50	18.88	**When**	11,000	7.27	11.85	19.12	0.24
37	12,000	16.38	2.72	19.10	**Revenues**	12,000	7.27	13.08	20.35	1.25
38	13,000	16.38	2.95	19.33	**Equal**	13,000	7.27	14.31	21.58	2.25
39	14,000	16.38	3.18	19.56	**Expenses**	14,000	7.27	15.54	22.81	3.25
40	15,000	16.38	3.41	19.79	**and**	15,000	7.27	16.77	24.04	4.25
41	16,000	16.38	3.63	20.01	**Return**	16,000	7.27	18.00	25.27	5.26
42	17,000	16.38	3.86	20.24	**on Equity**	17,000	7.27	19.23	26.50	6.26
43	18,000	16.38	4.09	20.47	**and**	18,000	7.27	20.46	27.73	7.26
44	19,000	16.38	4.31	20.69	**Income**	19,000	7.27	21.69	28.96	8.27
45	20,000	16.38	4.54	20.92	**Taxes**	20,000	7.27	22.92	30.19	9.27
46	21,000	16.38	4.77	21.15		21,000	7.27	24.15	31.42	10.27
47	22,000	16.38	4.99	21.37		22,000	7.27	25.38	32.65	11.28
48	23,000	16.38	5.22	21.60		23,000	7.27	26.61	33.88	12.28
49	24,000	16.38	5.45	21.83		24,000	7.27	27.84	35.11	13.28
50	25,000	16.38	5.68	22.06		25,000	7.27	29.07	36.34	14.28
51	26,000	16.38	5.90	22.28		26,000	7.27	30.30	37.57	15.29
52	27,000	16.38	6.13	22.51		27,000	7.27	31.53	38.80	16.29
53	28,000	16.38	6.36	22.74		28,000	7.27	32.76	40.03	17.29
54	**Average Usage**					**Average Usage**				
55	8,787	$ 16.38	$ 1.995	$ 18.37		8,787	$ 7.27	9.13	16.40	**(1.98)**

Arizona / American Mohave Water
Summary of Revenues by Customer Classification - Present and Proposed Rates
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1							
2							
3	Residential 5/8 Inch	$2,648,370	$2,769,461	121,091	4.57%	60.90%	60.96%
4	Residential 1 Inch	15,626	16,355	729	4.66%	0.36%	0.36%
5	Residential 1.5 Inch	-	-	-			
6	Residential 2 Inch	14,500	15,181	681	4.70%	0.33%	0.33%
7							
8	Residential Muti-family 5/8 Inch	94,231	98,486	4,255	4.52%	2.17%	2.17%
9	Residential Muti-family 1 Inch	44,888	46,920	2,032	4.53%	1.03%	1.03%
10	Residential Muti-family 1.5 Inch	16,223	16,944	721	4.44%	0.37%	0.37%
11	Residential Muti-family 2 Inch	248,296	259,467	11,170	4.50%	5.71%	5.71%
12	Residential Muti-family 4 Inch	17,645	18,442	797	4.52%	0.41%	0.41%
13	Residential Muti-family 6 Inch	162,922	170,218	7,296	4.48%	3.75%	3.75%
14							
15	Rio Water Residential 5/8 Inch	80,529	84,197	3,668	4.55%	1.85%	1.85%
16	Rio Water Residential 1 Inch	26	27	1	4.56%	0.00%	0.00%
17	Rio Water Residential 2 Inch	74	77	3	4.55%	0.00%	0.00%
18							
19	Commercial 5/8 Inch	125,418	131,218	5,800	4.62%	2.88%	2.89%
20	Commercial 1 Inch	90,568	94,804	4,236	4.68%	2.08%	2.09%
21	Commercial 1.5 Inch	28,828	30,185	1,357	4.71%	0.66%	0.66%
22	Commercial 2 Inch	355,657	372,403	16,746	4.71%	8.18%	8.20%
23	Commercial 3 Inch	51,990	54,437	2,447	4.71%	1.20%	1.20%
24							
25	Commercial Multi-Unit 5/8 Inch	16,427	17,174	747	4.55%	0.38%	0.38%
26	Commercial Multi-Unit 1 Inch	3,014	3,149	135	4.48%	0.07%	0.07%
27	Commercial Multi-Unit 1.5 Inch	2,619	2,741	122	4.66%	0.06%	0.06%
28	Commercial Multi-Unit 2 Inch	9,383	9,814	431	4.59%	0.22%	0.22%
29							
30	Public Authority 58 Inch	4,450	4,651	201	4.52%	0.10%	0.10%
31	Public Authority 1 Inch	5,109	5,348	239	4.67%	0.12%	0.12%
32	Public Authority 1.5 Inch	3,877	4,058	181	4.68%	0.09%	0.09%
33	Public Authority 2 Inch	61,130	64,005	2,874	4.70%	1.41%	1.41%
34	Public Authority 3 Inch	15,446	16,176	730	4.72%	0.36%	0.36%
35	Public Authority 4 Inch	19,712	20,643	931	4.72%	0.45%	0.45%
36	Public Authority 6 Inch	33,295	34,867	1,572	4.72%	0.77%	0.77%
37							
38	Private Fire 2 Inch	264	275	11	4.33%	0.01%	0.01%
39	Private Fire 4 Inch	4,554	4,759	205	4.50%	0.10%	0.10%
40	Private Fire 6 Inch	1,539	1,611	72	4.67%	0.04%	0.04%
41	Private Fire 8 Inch	588	615	27	4.58%	0.01%	0.01%
42	Private Fire 10 Inch	180	188	8	4.60%	0.00%	0.00%
43	Private Fire Hydrant	14,489	15,153	664	4.58%	0.33%	0.33%
44	Miscellaneous Revenues	108,705	108,705		0.00%	2.50%	2.39%
45	Difference Between Bill Count Rev. & G/L Rev.	48,141	50,376	2,235	4.64%	1.11%	1.11%
46	**Subtotal of Water Revenues**	$4,348,715	$4,543,132	$ 194,417	4.47%	100.00%	100.00%
47							

Arizona / American Mohave Water
Summary of Revenues by Customer Classification - Present and Proposed Rates
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-1
Page 2
Witness: Kozoman

Line No.		Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Additional Bills to be Issued	Additional Gallons to be Produced in 1,000's
1	Residential 5/8 Inch	49,762	52,038	2,276	4.57%	2,662	19,964
2	Residential 1 Inch	1,073	1,123	50	4.66%	24	507
3	Residential 1.5 Inch						
4	Residential 2 Inch	(1,244)	(1,302)	(58)	4.69%	(12)	(748)
5							
6	Residential Muti-family 5/8 Inch	(1,693)	(1,771)	(78)	4.63%	(9)	(515)
7	Residential Muti-family 1 Inch	57	59	3	4.58%	1	5
8	Residential Muti-family 1.5 Inch	(277)	(289)	(12)	4.39%	(8)	-
9	Residential Muti-family 2 Inch	(13,893)	(14,510)	(617)	4.44%	15	(1,854)
10	Residential Muti-family 4 Inch	-	-			-	-
11	Residential Muti-family 6 Inch	(10,652)	(11,114)	(463)	4.34%	(9)	493
12							
13	Rio Water Residential 5/8 Inch	2,721	2,844	124	4.55%	111	1,326
14	Rio Water Residential 1 Inch	287	300	13	4.56%	11	138
15	Rio Water Residential 2 Inch	212	221	10	4.55%	9	99
16							
17	Commercial 5/8 Inch	2,096	2,193	97	4.62%	78	1,038
18	Commercial 1 Inch	3,184	3,333	149	4.67%	60	1,603
19	Commercial 1.5 Inch	-	-			-	-
20	Commercial 2 Inch	10,608	11,107	499	4.71%	62	5,973
21	Commercial 3 Inch	2,711	2,839	128	4.70%	10	1,436
22							
23	Commercial Multi-Unit 5/8 Inch	3,966	4,150	185	4.65%	6	2,185
24	Commercial Multi-Unit 1 Inch	42	44	2	4.45%	1	9
25	Commercial Multi-Unit 1.5 Inch	-	-			-	-
26	Commercial Multi-Unit 2 Inch	(2,842)	(2,970)	(128)	4.50%	(8)	(688)
27							
28	Public Authority 58 Inch						
29	Public Authority 1 Inch	45	47	2	4.66%	1	21
30	Public Authority 1.5 Inch						
31	Public Authority 2 Inch	(977)	(1,023)	(46)	4.71%	(6)	(0.23)
32	Public Authority 3 Inch						
33	Public Authority 4 Inch	(18)	(19)	(1)	4.50%	(3)	-
34	Public Authority 6 Inch						
35							
36	Private Fire 2 Inch	132	138	6	4.33%	44	-
37	Private Fire 4 Inch						
38	Private Fire 6 Inch	81	85	4	4.67%	9	-
39	Private Fire 8 Inch	132	138	6	4.58%	11	-
40	Private Fire 10 Inch						
41	Private Fire Hydrant	(95)	(100)	(4)	4.58%	(12)	
42	Total Revenue Annualization	45,417	47,562	2,144	4.72%	3,048	30,993
43	Revenues from Page 1	4,348,715	4,543,132	194,417	4.47%		
44	Totals	4,394,133	4,590,694	196,561	4.47%	3,048	30,993

Arizona / American Mohave Water
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Number of Units at 12/31/01	Average Consumption Per Customer	Revenues Per Customer Present Rates	Revenues Per Customer Proposed Rates	Revenues Per Unit Present Rates	Revenues Per Unit Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1									-	
2									-	
3	Residential 5/8 Inch	11,933	11,933	7,500	18.27	19.10	18.27	19.10	0.83	4.57%
4	Residential 1 Inch	29	29	21,141	88.42	92.55	88.42	92.55	4.12	4.66%
5	Residential 1.5 Inch									
6	Residential 2 Inch	10	10	62,308	120.74	126.41	120.74	126.41	5.67	4.70%
7									-	
8	Residential Muti-family 5/8 Inch	178	578	13,801	43.76	45.74	13.45	14.05	1.97	4.51%
9	Residential Muti-family 1 Inch	38	262	33,048	98.49	102.95	14.27	14.91	4.46	4.53%
10	Residential Muti-family 1.5 Inch	4	133	71,750	366.69	382.98	10.13	10.58	16.29	4.44%
11	Residential Muti-family 2 Inch	108	1,641	53,220	189.71	198.24	12.46	13.02	8.53	4.50%
12	Residential Muti-family 4 Inch	2	107	216,583	731.83	764.88	13.68	14.30	33.06	4.52%
13	Residential Muti-family 6 Inch	1	757	1,920,929	7,008.36	7,322.32	11.78	12.31	313.96	4.48%
14										
15	Rio Water Residential 5/8 Inch	264	264	11,942	25.15	26.29	25.15	26.29	1.15	4.55%
16	Rio Water Residential 1 Inch	0	0	12,501	26.13	27.32	26.13	27.32	1.19	4.56%
17	Rio Water Residential 2 Inch	0	0	11,000	23.50	24.57	23.50	24.57	1.07	4.55%
18										
19	Commercial 5/8 Inch	378	378	13,691	27.43	28.70	27.43	28.70	1.27	4.62%
20	Commercial 1 Inch	135	135	28,529	55.74	58.35	55.74	58.35	2.61	4.68%
21	Commercial 1.5 Inch	16	16	85,344	149.83	156.88	149.83	156.88	7.05	4.71%
22	Commercial 2 Inch	163	163	103,576	181.81	190.37	181.81	190.37	8.56	4.71%
23	Commercial 3 Inch	15	15	153,110	285.12	298.54	285.12	298.54	13.42	4.71%
24										
25	Commercial Multi-Unit 5/8 Inch	20	86	25,526	69.33	72.48	15.81	16.53	3.15	4.55%
26	Commercial Multi-Unit 1 Inch	5	22	12,339	49.86	52.09	11.31	11.82	2.23	4.47%
27	Commercial Multi-Unit 1.5 Inch	1	5	123,250	218.26	228.44	43.65	45.69	10.18	4.66%
28	Commercial Multi-Unit 2 Inch	3	37	126,781	293.04	306.50	21.41	22.39	13.46	4.59%
29										
30	Public Authority 58 Inch	27	27	3,731	12.69	13.26	12.69	13.26	0.57	4.50%
31	Public Authority 1 Inch	8	8	27,158	53.71	56.22	53.71	56.22	2.51	4.67%
32	Public Authority 1.5 Inch	5	5	27,767	64.61	67.64	64.61	67.64	3.02	4.68%
33	Public Authority 2 Inch	37	37	74,826	139.26	145.81	139.26	145.81	6.55	4.70%
34	Public Authority 3 Inch	1	1	830,167	1,287.17	1,347.98	1,287.17	1,347.98	60.81	4.72%
35	Public Authority 4 Inch	1	1	1,050,083	1,642.64	1,720.25	1,642.64	1,720.25	77.61	4.72%
36	Public Authority 6 Inch	1	1	1,740,583	2,774.58	2,905.62	2,774.58	2,905.62	131.04	4.72%
37										
38	Private Fire 2 Inch	7	7	-	-	-	-	-	-	0.00%
39	Private Fire 4 Inch	63	63	-	-	-	-	-	-	0.00%
40	Private Fire 6 Inch	14	14	-	-	-	-	-	-	0.00%
41	Private Fire 8 Inch	4	4	-	-	-	-	-	-	0.00%
42	Private Fire 10 Inch	1	1	-	-	-	-	-	-	0.00%
43	Private Fire Hydrant	158	158	-	-	-	-	-	-	0.00%
44										
45										
46										
47	Subtotal	13,628	16,896							
48										
49	Actual Year End Number									
50	of Customers:	13,795	17,315							
51										

52 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Arizona / American Mohave Water
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1	Percentage Increase in Monthly Minimums				
2	Percentage Increase in Commodity Rates				
3					
4	**Monthly Usage Charge for:**				
5	Residential,Commercial, Irrigation, Resale and Miscellaneous Customers				
6	5/8 x 3/4 Inch	Rounded Down	$ 8.65	$ 9.030	4.39%
7	1 Inch	Rounded Down	15.00	$ 15.680	4.53%
8	1 1/2 Inch	Rounded Down	25.00	$ 26.150	4.60%
9	2 Inch	Rounded Down	30.00	$ 31.380	4.60%
10	3 Inch	Rounded Down	60.00	$ 62.770	4.62%
11	4 Inch	Rounded Down	90.00	$ 94.170	4.63%
12	6 Inch	Rounded Down	200.00	$ 209.270	4.64%
13	8 Inch	Rounded Down	400.00	$ 418.560	4.64%
14	10 Inch	Rounded Down	N/A	$ 723.200	N/A
15	Multi-unit rates based on multiple of 5/8 Inch minimum				
16					
17	Residential Rio Water				
18	5/8 Inch	Rounded Down	7.75	8.10	4.52%
19	1 Inch	Rounded Down	7.75	8.10	4.52%
20	2 Inch	Rounded Down	7.75	8.10	4.52%
21					
22	Private Fire				
23	2 Inch or smaller	Rounded Down	3.00	3.13	4.33%
24	4 Inch	Rounded Down	6.00	6.27	4.50%
25	6 Inch	Rounded Down	9.00	9.42	4.67%
26	8 Inch	Rounded Down	12.00	12.55	4.58%
27	10 Inch	Rounded Down	15.00	15.69	4.60%
28	12 Inch	Rounded Down	18.00	18.83	4.61%
29	14 Inch	Rounded Down	21.00	21.96	4.57%
30	20 Inch	Rounded Down	30.00	31.38	4.60%
31					
32	Per Sprinkler Head		0.51	0.53	3.92%
33	Per each Private Fire Hydrant		7.64	7.99	4.58%
34					
35	Gallons In Minimum				
36	All (except Rio Water)		1,000	1,000	
37	(Multi-unit rates based on multiple of)				
38	Rio Water		2,000	2,000	
39					
40					
41	**Tier 1:** Gallons upper limit				
42	All (except Rio Water)		999,999,999	999,999,999	
43	(Multi-unit rates based on multiple of 5/8 inch gallons of water in minimum)				
44	Rio Water		999,999,999	999,999,999	
45					
46	(a) Rounded to nearest whole cent				
47					
48					

Arizona / American Mohave Water
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1					
2					
3	**Tier 2:** (Gallon upper limit, up to, but not exceeding)				
4	All (except Rio Water)		999,999,999	999,999,999	
5	(Multi-unit rates based on multiple of 5/8 Meter Charge)				
6	Rio Water		999,999,999	999,999,999	
7					
8					
9					
10					
11					
12					
13					
14					
15	**Tier 3:** (Gallon over)				
16	All (except Rio Water)		999,999,999	999,999,999	
17	(Multi-unit rates based on multiple of 5/8 Meter Charge)				
18	Rio Water		999,999,999	999,999,999	
19					
20					
21					
22					
23					
24					
25					
26					
27	Commodity Rates (per 1,000 gallons over minimum and per Tier)				
28	All	Tier 1 (a)	$ 1.48	$ 1.55	4.73%
29	All	Tier 2 (a)	1.48	1.55	4.73%
30	All	Tier 3 (a)	1.48	1.55	4.73%
31	All	Tier 4 (a)	1.48	1.55	4.73%
32					
33					
34					
35	Rio Water	Tier1 (a)	$ 1.75	$ 1.83	4.57%
36	Rio Water	Tier 2 (a)	1.75	1.83	4.57%
37	Rio Water	Tier 3 (a)	1.75	1.83	4.57%
38	Rio Water	Tier 4 (a)	1.75	1.83	4.57%
39					
40	(a) Rounded to nearest whole cent				

Arizona / American Mohave Water
Changes in Representative Rate Schedules
Test Year Ended December 31, 2000

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates	
1	Establishment	$ 25.00	$ 25.00	
2	Re-establishment	$ 20.00	$ 20.00	
3	Reconnection (Deliquent)	$ 25.00	$ 25.00	
4	Reconnection (After Hours)	$ 40.00	$ 40.00	
5	Disconnection	$ 25.00	$ 25.00	
6	Reconnection (After Hours)	$ 40.00	$ 40.00	
7	Meter Test	$ 10.00	$ 10.00	
8	Deposit	**	**	
9	Deposit Interest	**	**	
10	Re-Establishment (With-in 12 Months)	***	***	
11				
12	NSF Check	$ 15.00	$ 15.00	
13	Deferred Payment, Per Month (b)	1.50%	1.50%	
14	Meter Re-Read	$ 15.00	$ 15.00	
15	Charge of Moving Customer Meter -			
16	Customer Requested	Cost	Cost	
17	Late Payment Charge, greater of 1.50% or	$ 5.00	$ 5.00	(1)
18	Damages to Meter Locks, Valves, Seals	Cost	Cost	(2)
19	Sprinklers	See Sch. H-3, Page 1		
20				
21				
22	** PER COMMISSION RULES (R14-2-403.B)			
23	*** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)			
24	IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM			
25	ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE			
26	TAX. PER COMMISSION RULE (14-2-409.D 5)			
27	ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,			
28	AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.			
29				
30				
31				

	Meter Size	Present Charges	Proposed Charges
32			
33			
34	5/8 x 3/4 Inch	$275	$500
35	3 / 4 Inch	$295	$575
36	1 Inch	$325	$660
37	1 1/2 Inch	$475	$900
38	2 Inch	$650	$1,525
39	3 Inch	Cost	Cost
40	4 Inch	Cost	Cost
41	6 Inch	Cost	Cost
42	8 Inch	Cost	Cost
43			
44	As meters and service lines are now taxable income for income purposes, The Company		
45	shall collect income taxes on the meter and service line charges.		
46	Any tax collected will be refunded each year that the meter deposit is refunded.		
47			
48	Foothills System / Facility Construction Advance		
49	Per Equivalent Residential Unit $ 350.00		
50			

SUN CITY
WATER DIVISION

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Present Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-1
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and **(1)** Revenue Annualizations	6,063,298	2,699,560	4,973	115,782	1,735,928	929,375	82,640	77,742	414,880	2,419	-
Standby Revenues **(a)**	2,646	2,646									
Misc. Revenue **(a)**	113,419	113,419									
Total Revenues	6,179,363	2,815,625	4,973	115,782	1,735,928	929,375	82,640	77,742	414,880	2,419	-
Operating Expenses **(b)**	5,011,349	3,104,949	5,203	72,904	877,196	500,181	41,584	87,598	289,940	31,793	-
Depreciation and Amortization **(b)**	954,848	574,014	1,031	13,695	161,535	100,101	8,307	26,484	55,846	13,835	-
Property Tax **(c)**	238,638	108,735	192	4,471	67,039	35,891	3,191	3,002	16,022	93	-
Income Tax **(d)**	(237,836)	(496,278)	(789)	5,978	196,750	84,329	8,959	(21,878)	5,112	(20,020)	-
Total Operating Expenses	5,966,999	3,291,420	5,637	97,049	1,302,520	720,503	62,042	95,206	366,920	25,702	-
Operating Income	212,365	(475,795)	(664)	18,733	433,408	208,872	20,598	(17,465)	47,960	(23,283)	-
Interest Expense **(e)**	604,428	342,300	636	8,878	109,074	69,859	5,829	18,600	39,533	9,720	-
Net Income	(392,063)	(818,095)	(1,300)	9,855	324,334	139,014	14,769	(36,064)	8,427	(33,003)	-
Rate Base **(f)**	21,433,625	12,138,297	22,547	314,828	3,867,873	2,477,264	206,698	659,567	1,401,873	344,677	-
Rate of Return **(g)**	0.99%	-3.92%	-2.95%	5.95%	11.21%	8.43%	9.97%	-2.65%	3.42%	-6.75%	

(1) Present Revenues from Company's Bill Counts.
(a) Standby Revenues and Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	(629,899)										
Percent of Taxable Income		208.66%	0.33%	-2.51%	-82.72%	-35.46%	-3.77%	9.20%	-2.15%	8.42%	0.00%
Income Tax		(237,836)	(237,836)	(237,836)	(237,836)	(237,836)	(237,836)	(237,836)	(237,836)	(237,836)	(237,836)
Allocated Income Tax		(496,278)	(789)	5,978	196,750	84,329	8,959	(21,878)	5,112	(20,020)	-
Income Tax											
Property Tax Allocation	238,638	45.56%	0.08%	1.87%	28.09%	15.04%	1.34%	1.26%	6.71%	0.04%	0.00%
Property Tax Allocation	238,638	108,735	192	4,471.34	67,039.03	35,891.13	3,191.42	3,002.27	16,022.05	93.42	-

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Proposed Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-2
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and **(1)** Revenue Annualizations	8,009,568	3,498,884	6,436	151,074	2,292,035	1,245,919	115,354	114,031	582,590	3,246	
Standby Revenues **(a)**	3,490	3,490									
Misc. Revenue **(a)**	113,419	113,419									
Total Revenues	8,126,477	3,615,793	6,436	151,074	2,292,035	1,245,919	115,354	114,031	582,590	3,246	-
Operating Expenses **(b)**	5,011,349	3,104,949	5,203	72,904	877,196	500,181	41,584	87,598	289,940	31,793	-
Depreciation and Amortization **(b)**	954,848	574,014	1,031	13,695	161,535	100,101	8,307	26,484	55,846	13,835	-
Property Tax **(c)**	238,638	106,180	189	4,436	67,307	36,587	3,387	3,349	17,108	95	-
Income Tax **(d)**	506,619	(196,788)	(240)	19,677	414,200	207,380	21,633	(8,461)	69,294	(20,076)	-
Total Operating Expenses	6,711,454	3,588,355	6,183	110,713	1,520,238	844,250	74,912	108,969	432,187	25,648	-
Operating Income	1,415,023	27,438	252	40,362	771,797	401,669	40,442	5,062	150,403	(22,402)	-
Interest Expense **(e)**	604,428	342,300	636	8,878	109,074	69,859	5,829	18,600	39,533	9,720	-
Net Income	810,595	(314,862)	(383)	31,484	662,723	331,810	34,613	(13,538)	110,870	(32,122)	-
Rate Base **(f)**	21,433,625	12,138,297	22,547	314,828	3,867,873	2,477,264	206,698	659,567	1,401,873	344,677	-
Rate of Return **(g)**	6.60%	0.23%	1.12%	12.82%	19.95%	16.21%	19.57%	0.77%	10.73%	-6.50%	
Percent of Total Customers		88.103%	0.127%	1.107%	7.284%	2.666%	0.122%	0.271%	0.271%	0.050%	0.000%

(1) Revenues are from ACC Staff Billl Counts / Proposed Rates.
(a) Standby Revenues and Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	1,317,214										
Percent of Taxable Income		-39%	0%	4%	82%	41%	4%	-2%	14%	-4%	0%
Income Tax		506,619	506,619	506,619	506,619	506,619	506,619	506,619	506,619	506,619	506,619
Allocated Income Tax		(196,788)	(240)	19,677	414,200	207,380	21,633	(8,461)	69,294	(20,076)	-
Percent of Revenues		44.49%	0.08%	1.86%	28.20%	15.33%	1.42%	1.40%	7.17%	0.04%	0.00%
Property Tax Allocation	238,638	106,180	189	4,436	67,307	36,587	3,387	3,349	17,108	95	-

Arizona American - Sun City Water
Test Year Ended December 31, 2000
Cost of Service Study Using Commodity / Demand Method
Allocation of Assets to Customer Classes Using ACC Staff Net Plant

Exhibit
Rebuttal Schedule G-3
Page 1
Witness: Kozoman

Line No.		Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
1	Plant, Minus Accumulated Depreciation, Advances and Contributions in Aid and Meter Deposits (from Schedule G-5, Page 1)											
2	Commodity	1,323,950	543,656	1,073	24,584	376,808	197,263	18,520	19,890	142,146	11	-
3	Demand	13,351,476	6,719,243	14,473	211,064	2,777,429	1,626,485	148,865	516,891	1,033,783	303,243	-
4	Customer	1,896,030	1,670,463	2,399	20,989	138,099	50,545	2,313	5,140	5,140	942	-
5	Service	2,542,885	2,129,697	3,058	30,528	215,740	102,560	6,230	20,121	29,536	5,415	-
6	Meter	2,319,283	1,075,238	1,544	27,664	359,797	500,412	30,770	97,525	191,268	35,066	-
7	Totals	21,433,625	12,138,297	22,547	314,828	3,867,873	2,477,264	206,698	659,567	1,401,873	344,677	-
8												
9												
10	Commodity	-	-	-	-	-	-	-	-	-	-	-
11	Demand	-	-	-	-	-	-	-	-	-	-	-
12	Customer											
13	Service											
14	Meter											
15	Totals	-	-	-	-	-	-	-	-	-	-	-
16												
17												
18				-	-	-	-	-	-	-		
19				-	-	-	-	-	-	-	-	-
20				-	-	-	-	-	-	-		
21				-	-	-	-	-	-	-	-	-
22												
23	Net Rate Base	21,433,625	12,138,297	22,547	314,828	3,867,873	2,477,264	206,698	659,567	1,401,873	344,677	-
24												
		ACC Staff Interest Expense										
	Allocated Interest Expense	604,428	342,300	636	8,878	109,074	69,859	5,829	18,600	39,533	9,720	-
	Ratio of rate bases to total rate base		56.6320%	0.1052%	1.4689%	18.0458%	11.5578%	0.9644%	3.0773%	6.5405%	1.6081%	0.0000%

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Customer Classes Using ACC Staff Expenses

Exhibit
Rebuttal Schedule G-4
Page 1
Witness: Kozoman

	Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Operation and Maintenance Expense (from Rebuttal Schedule G-6, Page 1)											
Commodity	1,564,302	642,352	1,267	29,047	445,214	233,075	21,882	23,501	167,952	13	-
Demand	1,105,559	556,382	1,198	17,477	229,983	134,680	12,327	42,801	85,602	25,110	-
Customer	1,819,761	1,603,267	2,302	20,145	132,544	48,512	2,220	4,933	4,933	904	-
Service	163,333	136,793	196	1,961	13,857	6,588	400	1,292	1,897	348	-
Meter	358,395	166,155	239	4,275	55,599	77,328	4,755	15,070	29,556	5,419	-
Totals	5,011,349	3,104,949	5,203	72,904	877,196	500,181	41,584	87,598	289,940	31,793	-
Depreciaton Expense on Plant (from Rebuttal Schedule G-6, Page 2)											
Commodity	51,128	20,995	41	949	14,551	7,618	715	768	5,489	0	-
Demand	540,431	271,976	586	8,543	112,423	65,836	6,026	20,922	41,845	12,274	-
Customer	163,526	144,072	207	1,810	11,911	4,359	199	443	443	81	-
Service	118,638	99,361	143	1,424	10,065	4,785	291	939	1,378	253	-
Meter	81,124	37,610	54	968	12,585	17,503	1,076	3,411	6,690	1,227	-
Totals	954,848	574,014	1,031	13,695	161,535	100,101	8,307	26,484	55,846	13,835	-
Total Expenses (excluding Income Tax and Property Taxes)	5,966,197	3,678,963	6,234	86,599	1,038,731	600,283	49,891	114,081	345,786	45,629	-

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Rate Base by Function Using ACC Staff Plant and Accumulated Depreciation

Exhibit
Rebuttal Schedule G-5
Page 1
Witness: Kozoman

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Rate Base							
Plant minus (Accumulated Depreciation Contributions in Aid of Construction Advances in Aid of Construction and Meter Deposits)	21,433,625	13,351,476	1,323,950	1,896,030	2,319,283	2,542,885	21,433,625
	21,433,625	13,351,476	1,323,950	1,896,030	2,319,283	2,542,885	21,433,625

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Allocation of Property Taxes to Functions							
Revenue Requirement by Function	8,121,783	2,926,074	1,786,326	2,218,033	666,533	524,818	8,121,783
						-	-
Total Revenue Requirement	8,121,783	2,926,074	1,786,326	2,218,033	666,533	524,818	8,121,783
Property Taxes Allocation	238,638	85,975	52,487	65,171	19,584	15,420	238,638

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of
Construction and Meter Deposits Using ACC Staff Plant and Accumulated Depreciation to Functions

Exhibit
Rebuttal Schedule G-5
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accum. Depr. Adjustments. (Adj. 1,3,4,6)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible												
301.00	Organization	471			471	-	471	471					471
302.00	Franchises	2,851			2,851	-	2,851	2,851					2,851
303.00	Miscellaneous Intangibles	4,591			4,591	-	4,591	4,591					4,591
Total Intangible Plant		7,913	-		7,913	-	7,913						-
													-
	Source of Supply												-
310.00	Land and Land Rights	180,083	-		180,083	0	180,083	180,083					180,083
311.00	Structures and Improvements	875,244	327,261		547,983	8,269	539,714	539,714					539,714
312.00	Collecting and Impounding Res.	314	49		265	4	262	262					262
313.00	Lakes, Rivers, Other Intakes	-	-		-	-	-	-	-				-
314.00	Wells and Springs	1,891,544	843,819	(288,071)	1,335,796	30,068	1,305,728	1,175,155	130,573				1,305,728
Total Source of Supply Plant		2,947,185	1,171,129	(288,071)	2,064,127	38,340	2,025,787						-
													-
	Pumping												-
320.00	Land and Land Rights	8,456	-		8,456	-	8,456	8,456					8,456
321.00	Structures and Improvements	582,491	243,441		339,050	4,862	334,189	300,770	33,419				334,189
323.00	Other Power Production	9,554	2,035		7,519	211	7,308	6,577	731				7,308
325.00	Electric Pumping Equipment	6,668,796	3,665,585	(49,513)	3,052,725	145,941	2,906,784	2,616,106	290,678				2,906,784
326.00	Diesel Pumping Equipment	25,151	5,751		19,400	628	18,772	16,895	1,877				18,772
328.10	Gas Engine Pumping Equipment	249,781	129,986		119,795	6,254	113,540	102,186	11,354				113,540
Total Pumping Plant		7,544,229	4,046,797	(49,513)	3,546,945	157,896	3,389,049						-
					-								-
	Water Treatment				-								-
330.00	Land and Land Rights	-	-		-	-	-	-					-
331.00	Structures and Improvements	80,580	11,317		69,263	673	68,591	61,732	6,859				68,591
332.00	Water Treatment Equipment	393,190	137,849	(3,653)	258,994	8,145	250,849	225,764	25,085				250,849
Total Water Treatment Plant		473,770	149,166	(3,653)	328,257	8,817	319,440						-
													-
	Transmission and Distribution				-								-
340.00	Land and Land Rights	10,493	-		10,493	-	10,493	10,493					10,493
341.00	Structures and Improvements	28,604	368		28,236	286	27,950	25,155	2,795				27,950
342.00	Distribution, Reservoirs, & ST	1,512,511	527,406	(29,320)	1,014,425	11,469	1,002,956	902,660	100,296				1,002,956
343.00	Transmission and Distribution	14,034,103	3,278,830		10,755,273	94,455	10,660,819	9,594,737	1,066,082				10,660,819
344.00	Fire Mains	-	-		-	-	-						-
345.00	Services	4,783,796	2,180,392		2,603,404	59,294	2,544,110					2,544,110	2,544,110
346.00	Meters	3,232,044	872,216		2,359,828	40,545	2,319,283				2,319,283		2,319,283
348.00	Hydrants	1,814,681	658,097		1,156,584	17,971	1,138,613			1,138,613			1,138,613
349.00	Other Transmission & Distribution	523	235		288	5	282	254	28				282
Total Transmission and Distribution Plant		25,416,755	7,517,543	(29,320)	17,928,532	224,025	17,704,506						

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of Construction and Meter Deposits

Exhibit
Rebuttal Schedule G-5
Page 2a
Witness: Kozoman

		ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accumulated Depr. Adj. (Adj. 1,3,4,6)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
ALLOCATED COMMON PLANT													
Maricopa Common Plant													
389.00	Land and Land Rights	1,163	-		1,163	-	1,163	1,163					1,163
390.00	Structures and Improvements	798,274	74,118		724,156	10,758	713,399	713,399					713,399
391.00	Office Funiture and Equipment	502,391	85,925		416,466	13,869	402,597			402,597			402,597
391.10	Computer Equipment	(219,782)	(103,610)	(40,759)	(75,412)	(25,763)	(49,649)			(49,649)			(49,649)
392.00	Transportation Equipment	579,346	247,444		331,902	100,772	231,130	57,782		173,347			231,130
393.00	Stores Equipment	6,847	1,855		4,992	265	4,727			4,727			4,727
394.00	Tools, Shop and Garage	97,973	4,347		93,626	4,483	89,143			89,143			89,143
395.00	Laboratory Equipment	31,035	5,471		25,564	(823)	26,387			26,387			26,387
396.00	Power Operated Equipment	28,010	10,204	(163)	17,968	2,035	15,933	3,983		11,950			15,933
397.00	Communication Equipment	177,799	79,275		98,524	11,400	87,124	21,781		65,343			87,124
398.00	Miscellaneous Equipment	66,047	30,617		35,430	1,858	33,571			33,571			33,571
Total Common Plant		2,069,103	435,645	(40,922)	1,674,380	118,855	1,555,525						
	Youngtown Plant *	(148,497)	(39,391)		(109,106)		(109,106)	(109,106)					(109,106)
	ADFUC adjustment 3/95 **	-	(111,822)	111,822	(0)		(0)	(0)					(0)
	TOTAL WATER PLANT	38,310,459	13,169,068	(299,657)	25,441,047	547,933	24,893,114	16,463,913	1,669,777	1,896,030	2,319,283	2,544,110	24,893,114
Total Plant		38,310,459			25,441,047								
	Adjustments to Accumulated Depreciation												
Company's additional Accumulated Depreciation Adjustment			547,933		(547,933)								-
			13,717,001										
	Total Net Plant				24,893,114								
	Advances in Aid of Construction				2,331,186		(2,331,186)	(2,098,067)	(233,119)				(2,331,186)
	Contributions in Aid of Construction				1,127,078		(1,127,078)	(1,014,370)	(112,708)				(1,127,078)
	Customer Meter Deposits				1,225		(1,225)					(1,225)	(1,225)
	Total Rate Base				21,433,625		21,433,625	13,351,476	1,323,950	1,896,030	2,319,283	2,542,885	21,433,625

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of ACC Staff Expenses to Functions

Exhibit
Rebuttal Schedule G-6
Page 1
Witness: Kozoman

		ACC Staff Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Salaries and Wages	(a)	1,568,417	480,473	53,386	815,140	219,418	-	1,568,417
Purchased Water		-		-				-
Purchased Power		1,417,171		1,417,171				1,417,171
Chemicals		17,413		17,413				17,413
Repairs and Maintenance	(b)	540,312	325,063	36,118	13,833.73	1,965	163,333	540,312
Office Supplies and Expense		169,519			169,519			169,519
Outside Services		164,564			164,564			164,564
Service Company Charges		-	-	-	-	-	-	-
Water Testing		6,878		6,878				6,878
Rents		28,369			28,369			28,369
Transportation Expenses		22			22			22
Insurance - General Liability		78,437			78,437			78,437
Insurance - Health and Life		-	-		-			-
Regulatory Commission Expense - Rate Case		40,874			40,874			40,874
Miscellaneous Expense		864,693	264,892	29,432	449,400	120,969	-	864,693
Depreciation Expense, Allocated on Rebuttal Schedule G-6, Page 2								-
Taxes Other Than Income		114,680	35,131	3,903	59,602	16,043	-	114,680
Property Taxes, Allocated on Rebuttal Schedules G-1 & G-2				-	-			-
Income Tax, Allocated on Rebuttal Schedules G-1 & G-2								
		5,011,349	1,105,559	1,564,302	1,819,761	358,395	163,333	5,011,349

(a) Labor (Wages and Salaries) factor computations shown on Rebuttal Schedule G-7, Page 2a
(b) Repairs and Maintenance allocation factors computation shown on Rebuttal Schedule G-7, Page 2a

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciatio Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible										-
301.00	Organization	471		-							-
302.00	Franchises	2,851		-							-
303.00	Miscellaneous Intangibles	4,591		-							-
	Subtotal Intangible	7,913		-							-
											-
	Source of Supply										-
310.00	Land and Land Rights	180,083		-							-
311.00	Structures and Improvements	875,244	2.500%	21,881	21,881	21,881					21,881
312.00	Collecting and Impounding Res.	314	2.500%	8	8	8					8
313.00	Lakes, Rivers, Other Intakes	-		-	-						-
314.00	Wells and Springs	1,891,544	2.520%	47,667	47,667	42,900	4,767				47,667
	Subtotal Source of Supply	2,947,185		69,556							-
											-
	Pumping										-
320.00	Land and Land Rights	8,456		-	-						-
321.00	Structures and Improvements	582,491	1.670%	9,728	9,728	8,755	973				9,728
323.00	Other Power Production	9,554	4.420%	422	422	380	42				422
325.00	Electric Pumping Equipment	6,668,796	4.420%	294,761	294,761	265,285	29,476				294,761
326.00	Diesel Pumping Equipment	25,151	5.000%	1,258	1,258	1,132	126				1,258
328.10	Gas Engine Pumping Equipment	249,781	5.010%	12,514	12,514	11,263	1,251				12,514
	Subtotal Pumping	7,544,229		318,682							-
											-
	Water Treatment										-
330.00	Land and Land Rights			-	-						-
331.00	Structures and Improvements	80,580	1.670%	1,346	1,346	1,211	135				1,346
332.00	Water Treatment Equipment	393,190	4.000%	15,728	15,728	14,155	1,573				15,728
	Subtotal Water Treatment	473,770		17,073							-
											-
	Transmission and Distribution										-
340.00	Land and Land Rights	10,493		-	-						-
341.00	Structures and Improvements	28,604	2.000%	572	572	515	57				572
342.00	Distribution, Reservoirs, & ST	1,512,511	1.670%	25,259	25,259	22,733	2,526				25,259
343.00	Transmission and Distribution	14,034,103	1.530%	214,722	214,722	193,250	21,472				214,722
344.00	Fire Mains	-		-	-						-
345.00	Services	4,783,796	2.480%	118,638	118,638					118,638	118,638
346.00	Meters	3,232,044	2.510%	81,124	81,124				81,124		81,124
348.00	Hydrants	1,814,681	2.000%	36,294	36,294			36,294			36,294
349.00	Other Transmission & Distribution	523	2.000%	10	10	9	1				10
	Subtotal Transmission and Distribution	25,416,755		476,619							

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2a
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciation Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	General										
389.00	Land and Land Rights	1,163		-							-
390.00	Structures and Improvements	798,274	1.670%	13,331	13,331	13,331					13,331
391.00	Office Funiture and Equipment	502,391	4.590%	10,914	10,914			10,914			10,914
391.10	Computer Equipment	(219,782)	4.590%	15,626	15,626			15,626			15,626
392.00	Transportation Equipment	579,346	25.000%	107,102	107,102	26,776		80,327			107,102
393.00	Stores Equipment	6,847	3.910%	268	268			268			268
394.00	Tools, Shop and Garage	97,973	4.020%	3,939	3,939			3,939			3,939
395.00	Laboratory Equipment	31,035	3.710%	1,151	1,151			1,151			1,151
396.00	Power Operated Equipment	28,010	5.200%	1,491	1,491	373		1,118			1,491
397.00	Communication Equipment	177,799	10.300%	14,177	14,177	3,544		10,633			14,177
398.00	Miscellaneous Equipment	66,047	4.930%	3,256	3,256			3,256			3,256
	Subtotal General	2,069,103		171,257				-			
								-			-
Youngtown Plant		(148,497)	2.832%	(4,205)	(4,205)	(4,205)					(4,205)
ADFUC adjustment 3/95		-	2.832%	-							
	Subtotals	38,310,459		1,048,982							-
				-							
				-							
						-					-
						-					-
Amortization of Deferred Regulatory Asset		655,877	2.832%	18,573	18,573	18,573					18,573
Less: Amotization of Contributions		1,127,078	10.00%	(112,708)	(112,708)	(101,437)	(11,271)				(112,708)
Total Depreciation Expense				954,848	954,848	540,431	51,128	163,526	81,124	118,638	954,848

Arizona American - Sun City Water
Test Year Ended December 31, 2001
SUMMARY OF COMMODITY - DEMAND METHOD FUNCTION FACTORS

Exhibit
Rebuttal Schedule G-7
Page 1
Witness: Kozoman

Line No.	Description	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Totals
1												
2	Description	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Totals
3	Commodity	41.063%	0.081%	1.857%	28.461%	14.900%	1.399%	1.502%	10.737%	0.001%	0.00%	100.00%
4	Demand	50.326%	0.108%	1.581%	20.802%	12.182%	1.115%	3.871%	7.743%	2.271%	0.00%	100.00%
5	Customer	88.103%	0.127%	1.107%	7.284%	2.666%	0.122%	0.271%	0.271%	0.050%	0.00%	100.00%
6	Services	83.751%	0.120%	1.201%	8.484%	4.033%	0.245%	0.791%	1.162%	0.213%	0.00%	100.00%
7	Meters	46.361%	0.067%	1.193%	15.513%	21.576%	1.327%	4.205%	8.247%	1.512%	0.00%	100.00%
8												
9												
10												
11												
12												
13												

Arizona American - Sun City Water
Test Year Ended December 31, 2001
COMMODITY - DEMAND METHOD FUNCTION FACTORS
Plant and Depreciation Expense Allocations

Exhibit
Rebuttal Schedule G-7
Page 2
Witness: Kozoman

Line No.	Description	Total	Demand	Commodity	Customer
1					
2					
3	Wells	1.00	0.90	0.10	
4	Pumps & Equipment	1.00	0.90	0.10	
5	Distribution Mains	1.00	0.90	0.10	
6	Customer	1.00			1.00
7	Services	1.00			1.00
8	Meters	1.00			1.00
9	Fire Hydrants	1.00			1.00
10	Transportation Equip.	1.00	0.25		0.75
11	Office Furniture	1.00			1.00
12	Communication Equip.	1.00	0.25		0.75
13					
14					

15 **To Approximately Match ACC Staff Proposed Rates for 5/8 Inch Meter**
16 Demand and Commodity Allocation to Wells, Pumps and Equipment and
17 Distribution Mains would need to be changed to approximately match
18 ACC Staff's proposed monthly minimums and commodity rates. The
19 match would be ACC Staff's Proposed Rates to Computed Monthly
20 Minimum and Commodity rate WITHOUT Equity returns and
21 Income Taxes. Match would be based on cost only.
22
23
24

25 **Required Allocations:**

	Description	Total	Demand	Commodity	Customer
26					
27	Wells	1.00	(0.75)	1.75	
28	Pumps & Equipment	1.00	(0.75)	1.75	
29	Distribution Mains	1.00	(0.75)	1.75	
30					
31					
32					

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 2a
Witness: Kozoman

Labor Allocation Factors	
Pumping Labor	34.04%
Meter Labor	13.99%
Customer Labor	51.97%
	100.00%

Repairs and Maintenance Allocation Factors	
Repairs and Maintenance Demand	13.54%
Repairs and Maintenance Pumping	42.92%
Repairs and Maintenance Mains	10.38%
Repairs and Maintenance Services	30.23%
Repairs and Maintenance Meters	0.36%
Repairs and Maintenance Customer	2.56%
	100.00%

Computations shown on this work sheet are from page labeled asTrial Balance in this work book. Allocation percentage were computed based on Expenses charged by Citizens Utilities and are then applied to ACC Staff expense amounts.

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF CLASS ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 3
Witness: Kozoman

COMMODITY ALLOCATION FACTOR

Meter Size	(a) Total Gallons (in 1,000's) In Test Year	Percent of Total
5/8" x 3/4"	1,952,332	41.06%
3/4"	3,852	0.08%
1"	88,283	1.86%
1-1/2"	1,353,160	28.46%
2"	708,395	14.90%
3"	66,508	1.40%
4"	71,427	1.50%
6"	510,464	10.74%
8"	38	0.001%
10"	-	0.000%
Totals	4,754,460	100.00%

DEMAND ALLOCATION FACTOR

Meter Size	(a) Number of Meters and/or Services	Equiv-alent Weight	Equivalent Number of Meters and/or Services	Percent of Total
5/8" x 3/4	19,499	1.0	19,499	50.33%
3/4"	28	1.5	42	0.11%
1"	245	2.5	613	1.58%
1-1/2"	1,612	5.0	8,060	20.80%
2"	590	8.0	4,720	12.18%
3"	27	16.0	432	1.11%
4"	60	25.0	1,500	3.87%
6"	60	50.0	3,000	7.74%
8"	11	80.0	880	2.27%
10"	-	160.0	0	0.00%
Totals	22,132		38,746	100.00%

CUSTOMER ALLOCATION FACTOR

Meter Size	Number of Meters	Percent of Total
5/8" x 3/4"	19,499	88.10%
3/4"	28	0.13%
1"	245	1.11%
1-1/2"	1,612	7.28%
2"	590	2.67%
3"	27	0.12%
4"	60	0.27%
6"	60	0.27%
8"	11	0.05%
10"	0	0.00%
Totals	22,132	100.00%

SERVICES ALLOCATION FACTOR (b)

Meter Size	Number of Services	Install-ation Cost	Weighted Number Services	Percent of Total
5/8" x 3/4	19,499	$ 355.00	6,922,145	83.75%
3/4"	28	355.00	9,940	0.12%
1"	245	405.00	99,225	1.20%
1-1/2"	1,612	435.00	701,220	8.48%
2"	590	565.00	333,350	4.03%
3"	27	750.00	20,250	0.25%
4"	60	1,090.00	65,400	0.79%
6"	60	1,600.00	96,000	1.16%
8"	11	1,600.00	17,600	0.21%
10"	0	1,600.00	0	0.00%
Totals	22,132		8,265,130	100.00%

METER ALLOCATION FACTOR (b)

Meter Size	Number of Meters	Meter Cost	Weighted Dollars of Meters	Percent of Total
5/8" x 3/4"	19,499	$ 105.00	2,047,395	46.36%
3/4"	28	105.00	2,940	0.07%
1"	245	215.00	52,675	1.19%
1-1/2"	1,612	425.00	685,100	15.51%
2"	590	1,615.00	952,850	21.58%
3"	27	2,170.00	58,590	1.33%
4"	60	3,095.00	185,700	4.20%
6"	60	6,070.00	364,200	8.25%
8"	11	6,070.00	66,770	1.51%
10"	0	6,070.00	0	0.00%
Totals	22,132		4,416,220	100.00%

(a) Includes customer and gallon sold annualization

(b) Meter and Service Line cost from Arizona Corporation Commission Memo of April 23, 2002 from Marlin Scott, Jr.. Meter costs based on compound meters. Cost of service line and

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Including Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	1,896,030	2,542,885	2,319,283	6,758,199
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	53,468	71,709	65,404	190,581
4	Rate Bases	1,896,030	2,542,885	2,319,283	6,758,199
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	71,291	95,612	87,205	254,108
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	116,106	155,717	142,025	413,848
9					
10	Revenue Requirement for Debt Component, from Line 3	53,468	71,709	65,404	190,581
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	116,106	155,717	142,025	413,848
13	Total Return Requirement with Income Tax	169,574	227,427	207,429	604,430
14					
15	Property Tax Expense, from Schedule G-5, Page 1	65,171	15,420	19,584	100,176
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	1,819,761	163,333	358,395	2,341,488
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	163,526	118,638	81,124	363,289
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	2,218,033	524,818	666,533	3,409,383
19					
20	**Customer Charge**				
21	Number of Bills = 22,132 times 12	265,584			
22					
23	**Charge per Bill**	$ 8.35			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 38,746 times 12		464,946	464,946	
28					
29	**Charge per Equivalent Meter**		$ 1.13	$ 1.43	
30					
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge)				
34	Charge per Bill (Customer Charge with Equity Return and Income Tax)	$ 8.35			
35	Charge per Equivalent Meter (For Service Line Charge with Equity Return and Income Tax)	1.13			
36	Charge per Equivalent Meter (For Meter Charge with Equity Return and Income Tax)	1.43			
37	(Service and Meter Revenue Requirement divided by Annual Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter	$ 10.91			
39					

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Excluding Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1a
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	1,896,030	2,542,885	2,319,283	6,758,199
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	53,468	71,709	65,404	190,581
4	Rate Bases	1,896,030	2,542,885	2,319,283	6,758,199
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	0.00%	0.00%	0.00%	0.00%
6	Required Operating Income for Equity	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-
9					
10	Revenue Requirement for Debt Component, from Line 3	53,468	71,709	65,404	190,581
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	-	-	-	-
13	Total Return Requirement with Income Tax	53,468	71,709	65,404	190,581
14					
15	Property Tax Expense, from Schedule G-5, Page 1	65,171	15,420	19,584	100,176
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	1,819,761	163,333	358,395	2,341,488
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	163,526	118,638	81,124	363,289
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	2,101,926	369,101	524,508	2,995,535
19					
20	**Customer Charge**				
21	Number of Bills = 22,132 times 12	265,584			
22					
23	**Charge per Bill**	$ 7.91			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 38,746 times 12		464,946	464,946	
28					
29	**Charge per Equivalent Meter**		$ 0.79	$ 1.13	
30	**Actual Cost (without Equity Returns or Income Taxes)**				
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge, nor recovery of return or income tax)				
34	Charge per Bill (Customer Charge without Equity Return or Income Tax)	$ 7.91			
35	Charge per Equivalent Meter (For Service Line Charge without Equity Return or Income Tax)	0.79			
36	Charge per Equivalent Meter (For Meter Charge without Equity Return or Income Tax)	1.13			
37	(Service and Meter Revenue Requirement divided by Annualized Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter without recovery of Equity Return or Income Tax	$ 9.84			

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Including Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	13,351,476
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	376,512
5	Rate Base	13,351,476
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%
7	Required Operating Income for Equity	502,015
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	817,597
10		
11	Revenue Requirement for Debt Component, from Line 4	376,512
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	817,597
14		
15	Property Tax Expense, from Schedule G-5, Page 1	85,975
16	Demand Expenses, from Schedule G-6, Page 1	1,105,559
17	Depreciation, from Schedule G-6, Page 2	540,431
18	Totals	2,926,074
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	464,946
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 6.29
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 6.29	1.0	$ 6.29
26	3/4 Inch Meter	$ 6.29	1.5	9.44
27	1 Inch Meter	$ 6.29	2.5	15.73
28	1 1/2 Inch Meter	$ 6.29	5.0	31.47
29	2 Inch Meter	$ 6.29	8.0	50.35
30	3 Inch Meter	$ 6.29	15.0	94.40
31	4 Inch Meter	$ 6.29	25.0	157.33
32	6 Inch Meter	$ 6.29	50.0	314.67
33	8 Inch Meter	$ 6.29	80.0	503.47
34	10 Inch Meter	$ 6.29	160.0	1,006.94

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Excluding Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2a
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	13,351,476
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	376,512
5	Rate Base	13,351,476
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	
7	Required Operating Income for Equity	-
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	-
10		
11	Revenue Requirement for Debt Component, from Line 4	376,512
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	-
14		
15	Property Tax Expense, from Schedule G-5, Page 1	85,975
16	Demand Expenses, from Schedule G-6, Page 1	1,105,559
17	Depreciation, from Schedule G-6, Page 2	540,431
18	Totals	2,108,476
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	464,946
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 4.53
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 4.53	1.0	$ 4.53
26	3/4 Inch Meter	$ 4.53	1.5	6.80
27	1 Inch Meter	$ 4.53	2.5	11.34
28	1 1/2 Inch Meter	$ 4.53	5.0	22.67
29	2 Inch Meter	$ 4.53	8.0	36.28
30	3 Inch Meter	$ 4.53	15.0	68.02
31	4 Inch Meter	$ 4.53	25.0	113.37
32	6 Inch Meter	$ 4.53	50.0	226.74
33	8 Inch Meter	$ 4.53	80.0	362.79
34	10 Inch Meter	$ 4.53	160.0	725.58

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including and Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 3
Witness: Kozoman

Including Equity Return and Income Taxes

Line No.		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Proposed Monthly Minimum to Computed Minimum
1	5/8 x 3/4 Inch Meter	$ 8.35	$ 1.13	$ 1.43	$ 6.29	$ 17.21	6.59	38.30%
2	3/4 Inch Meter	8.35	1.69	2.15	9.44	21.64	6.59	30.46%
3	1 Inch Meter	8.35	2.82	3.58	15.73	30.49	17.15	56.25%
4	1 1/2 Inch Meter	8.35	5.64	7.17	31.47	52.63	36.93	70.17%
5	2 Inch Meter	8.35	9.03	11.47	50.35	79.20	54.07	68.27%
6	3 Inch Meter	8.35	16.93	21.50	94.40	141.19	92.32	65.39%
7	4 Inch Meter	8.35	28.22	35.84	157.33	229.74	135.85	59.13%
8	6 Inch Meter	8.35	56.44	71.68	314.67	451.14	185.97	41.22%
9	8 Inch Meter	8.35	90.30	172.03	503.47	774.15		
10	10 Inch Meter	8.35	270.91	573.43	1,006.94	1,859.62		
11								
12								

Excluding Equity Return and Income Taxes

Line No.		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Proposed Monthly Minimum to Computed Minimum
13								
14								
15								
16								
17								
18								
19								
20								
21	5/8 x 3/4 Inch Meter	$ 7.91	$ 0.79	$ 1.13	$ 4.53	$ 14.37	6.59	45.86%
22	3/4 Inch Meter	7.91	1.19	1.69	6.80	17.60	6.59	37.44%
23	1 Inch Meter	7.91	1.98	2.82	11.34	24.06	17.15	71.29%
24	1 1/2 Inch Meter	7.91	3.97	5.64	22.67	40.20	36.93	91.87%
25	2 Inch Meter	7.91	6.35	9.02	36.28	59.57	54.07	90.77%
26	3 Inch Meter	7.91	11.91	16.92	68.02	104.77	92.32	88.12%
27	4 Inch Meter	7.91	19.85	28.20	113.37	169.34	135.85	80.23%
28	6 Inch Meter	7.91	39.69	56.41	226.74	330.76	185.97	56.23%
29	8 Inch Meter	7.91	63.51	90.25	362.79	524.46		
30	10 Inch Meter	7.91	127.02	180.50	725.58	1,041.01		

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 4
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	1,323,950	1,896,030	2,542,885	2,319,283	13,351,476	21,433,625
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.820%	2.820%	2.820%	2.820%	2.820%	2.820%
3	Required Operating Income - for Debt	37,335	53,468	71,709	65,404	376,512	604,428
4	Rate Bases from Schedule G-5, Page 1	1,323,950	1,896,030	2,542,885	2,319,283	13,351,476	21,433,625
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	49,781	71,291	95,612	87,205	502,015	805,904
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	81,074	116,106	155,717	142,025	817,597	1,312,520
9							
10	Revenue Requirement for Debt Component, from Line 3	37,335	53,468	71,709	65,404	376,512	604,428
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	81,074	116,106	155,717	142,025	817,597	1,312,520
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	118,409	169,574	227,427	207,429	1,194,109	1,916,948
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	52,487	65,171	15,420	19,584	85,975	238,638
16	Expenses (From Sch. G-6. Page 1)	1,564,302	1,819,761	163,333	358,395	1,105,559	5,011,349
17	Depreciation and Amortization (From Schedule G-6, Page 2)	51,128	163,526	118,638	81,124	540,431	954,848
18	Total Revenue Requirement by function	1,786,326	2,218,033	524,818	666,533	2,926,074	8,121,783
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	4,754,460	265,584	464,946	464,946	464,946	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.3757					
22	(Line 18 divided by Line 20)		$ 8.35	$ 1.13	$ 1.43	$ 6.29	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 17.21	
24							

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 4a
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	1,323,950	1,896,030	2,542,885	2,319,283	13,351,476	21,433,625
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	37,335	53,468	71,709	65,404	376,512	604,428
4	Rate Bases from Schedule G-5, Page 1	1,323,950	1,896,030	2,542,885	2,319,283	13,351,476	21,433,625
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)						
6	Required Operating Income for Equity	-	-	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	-	-	-	-	-	-
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-	-	-
9							
10	Revenue Requirement for Debt Component, from Line 3	37,335	53,468	71,709	65,404	376,512	604,428
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	-	-	-	-	-	-
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	37,335	53,468	71,709	65,404	376,512	604,428
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	52,487	65,171	15,420	19,584	85,975	238,638
16	Expenses (From Sch. G-6. Page 1)	1,564,302	1,819,761	163,333	358,395	1,105,559	5,011,349
17	Depreciation and Amortization (From Schedule G-6, Page 2)	51,128	163,526	118,638	81,124	540,431	954,848
18	Total Revenue Requirement by function	1,705,252	2,101,926	369,101	524,508	2,108,476	6,809,263
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	4,754,460	265,584	464,946	464,946	464,946	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.3587					
22	(Line 18 divided by Line 20)		$ 7.9144	$ 0.7939	$ 1.1281	$ 4.5349	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 14.37	

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **without** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 1
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4a	$0.3587
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	$ 4.53
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	7.91
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	0.79
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	1.13
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4a	$ 14.37

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 6.59
Proposed Commodity Rate			
0	to	4,000	$ 0.78
4,001	to	100,000	$ 1.17
Over 100,001			$ 1.39

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4)
	Computed Costs, without Equity Return or Income Taxes									Recovery of Expenses or,
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	(Lack of Recovery)
	-	$ 14.37	-	$ 14.37		-	$ 6.59		$ 6.59	$ (7.78)
	1,000	$ 14.37	$0.3587	$ 14.73		1,000	6.59	$ 0.78	7.37	(7.36)
	2,000	14.37	0.72	15.09		2,000	6.59	1.56	8.15	(6.94)
	3,000	14.37	1.08	15.45		3,000	6.59	2.34	8.93	(6.52)
	4,000	14.37	1.43	15.81		4,000	6.59	3.12	9.71	(6.10)
	5,000	14.37	1.79	16.16		5,000	6.59	4.29	10.88	(5.28)
	6,000	14.37	2.15	16.52		6,000	6.59	5.46	12.05	(4.47)
	7,000	14.37	2.51	16.88		7,000	6.59	6.63	13.22	(3.66)
	8,000	14.37	2.87	17.24		8,000	6.59	7.80	14.39	(2.85)
	9,000	14.37	3.23	17.60		9,000	6.59	8.97	15.56	(2.04)
	10,000	14.37	3.59	17.96		10,000	6.59	10.14	16.73	(1.23)
	11,000	14.37	3.95	18.32	**Usage**	11,000	6.59	11.31	17.90	(0.42)
	11,515	14.37	4.13	18.50	**<-Level->**	**11,515**	6.59	11.91	18.50	0.00
	12,000	14.37	4.30	18.68	**When**	12,000	6.59	12.48	19.07	0.39
	13,000	14.37	4.66	19.03	**Revenues**	13,000	6.59	13.65	20.24	1.21
	14,000	14.37	5.02	19.39	**Equal**	14,000	6.59	14.82	21.41	2.02
	15,000	14.37	5.38	19.75	**Expenses**	15,000	6.59	15.99	22.58	2.83
	16,000	14.37	5.74	20.11		16,000	6.59	17.16	23.75	3.64
	17,000	14.37	6.10	20.47	**(No Rate**	17,000	6.59	18.33	24.92	4.45
	18,000	14.37	6.46	20.83	**of Return**	18,000	6.59	19.50	26.09	5.26
	19,000	14.37	6.81	21.19	**on**	19,000	6.59	20.67	27.26	6.07
	20,000	14.37	7.17	21.54	**Equity**	20,000	6.59	21.84	28.43	6.89
	21,000	14.37	7.53	21.90	**or Income**	21,000	6.59	23.01	29.60	7.70
	22,000	14.37	7.89	22.26	**Taxes**	22,000	6.59	24.18	30.77	8.51
	23,000	14.37	8.25	22.62	**Included)**	23,000	6.59	25.35	31.94	9.32
	24,000	14.37	8.61	22.98		24,000	6.59	26.52	33.11	10.13
	25,000	14.37	8.97	23.34		25,000	6.59	27.69	34.28	10.94
	26,000	14.37	9.33	23.70		26,000	6.59	28.86	35.45	11.75
	27,000	14.37	9.68	24.06		27,000	6.59	30.03	36.62	12.56
	28,000	14.37	10.04	24.41		28,000	6.59	31.20	37.79	13.38
	29,000	14.37	10.40	24.77		29,000	6.59	32.37	38.96	14.19
	30,000	14.37	10.76	25.13		30,000	6.59	33.54	40.13	15.00
	Average Usage					**Average Usage**				
	8,361	14.37	3.00	17.37		8,361	6.59	8.22	14.81	**(2.56)**

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **with** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 2
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4	$0.3757
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	$ 6.29
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	8.35
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	1.43
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	1.13
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4	$ 17.21

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 6.59
Proposed Commodity Rate			
0	to	4,000	$ 0.78
4,001	to	100,000	$ 1.17
Over 100,001			$ 1.39

Computed Costs, with Equity Return and Income Taxes

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4) Recovery of Expenses Rate of Return & IncomeTax or (Lack of Recovery)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	
	-	$ 17.21	-	$ 17.21		-	$ 6.59		$ 6.59	$ (10.62)
	1,000	$ 17.21	$0.3757	$ 17.58		1,000	6.59	$ 0.78	7.37	(10.21)
	2,000	17.21	0.75	17.96		2,000	6.59	1.56	8.15	(9.81)
	3,000	17.21	1.13	18.33		3,000	6.59	2.34	8.93	(9.40)
	4,000	17.21	1.50	18.71		4,000	6.59	3.12	9.71	(9.00)
	5,000	17.21	1.88	19.09		5,000	6.59	4.29	10.88	(8.21)
	6,000	17.21	2.25	19.46		6,000	6.59	5.46	12.05	(7.41)
	7,000	17.21	2.63	19.84		7,000	6.59	6.63	13.22	(6.62)
	8,000	17.21	3.01	20.21		8,000	6.59	7.80	14.39	(5.82)
	9,000	17.21	3.38	20.59		9,000	6.59	8.97	15.56	(5.03)
	10,000	17.21	3.76	20.96		10,000	6.59	10.14	16.73	(4.23)
	11,000	17.21	4.13	21.34		11,000	6.59	11.31	17.90	(3.44)
	12,000	17.21	4.51	21.72		12,000	6.59	12.48	19.07	(2.65)
	13,000	17.21	4.88	22.09		13,000	6.59	13.65	20.24	(1.85)
	14,000	17.21	5.26	22.47		14,000	6.59	14.82	21.41	(1.06)
	15,000	17.21	5.64	22.84	**Usage**	15,000	6.59	15.99	22.58	(0.26)
	15,335	17.21	5.76	22.97	**<-Level->**	**15,335**	6.59	16.38	22.97	0.00
	16,000	17.21	6.01	23.22	**When**	16,000	6.59	17.16	23.75	0.53
	17,000	17.21	6.39	23.59	**Revenues**	17,000	6.59	18.33	24.92	1.33
	18,000	17.21	6.76	23.97	**Equal**	18,000	6.59	19.50	26.09	2.12
	19,000	17.21	7.14	24.35	**Expenses**	19,000	6.59	20.67	27.26	2.91
	20,000	17.21	7.51	24.72	**and**	20,000	6.59	21.84	28.43	3.71
	21,000	17.21	7.89	25.10	**Return**	21,000	6.59	23.01	29.60	4.50
	22,000	17.21	8.27	25.47	**on Equity**	22,000	6.59	24.18	30.77	5.30
	23,000	17.21	8.64	25.85	**and**	23,000	6.59	25.35	31.94	6.09
	24,000	17.21	9.02	26.22	**Income**	24,000	6.59	26.52	33.11	6.89
	25,000	17.21	9.39	26.60	**Taxes**	25,000	6.59	27.69	34.28	7.68
	26,000	17.21	9.77	26.98		26,000	6.59	28.86	35.45	8.47
	27,000	17.21	10.14	27.35		27,000	6.59	30.03	36.62	9.27
	28,000	17.21	10.52	27.73		28,000	6.59	31.20	37.79	10.06
	Average Usage					**Average Usage**				
	8,361	$ 17.21	$ 3.141	$ 20.35		8,361	$ 6.59	8.22	14.81	**(5.54)**

Arizona American - Sun City
Test Year Ended December 31, 2001
Summary of Revenues by Customer Classification - Present and Proposed Rates
With Annualized Revenues to Year End Number of Customers

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Meter Size	Customer Classification	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8 Inch	Residential	$2,662,562	$ 4,579,810	$1,917,248	72.01%	43.80%	44.16%
2	3/4 Inch	Residential	1,817	3,124	1,307	71.93%	0.03%	0.03%
3	1 Inch	Residential	66,498	114,318	47,819	71.91%	1.09%	1.10%
4	1.5 Inch	Residential	1,485,121	2,552,475	1,067,353	71.87%	24.43%	24.61%
5	2 Inch	Residential	632,378	1,086,839	454,461	71.87%	10.40%	10.48%
6	3 Inch	Residential	13,103	22,512	9,409	71.80%	0.22%	0.22%
7	6 Inch	Residential	6,383	10,973	4,589	71.89%	0.11%	0.11%
8	5/8 Inch	Commercial	25,941	44,577	18,636	71.84%	0.43%	0.43%
9	3/4 Inch	Commercial	3,226	5,544	2,318	71.84%	0.05%	0.05%
10	1 Inch	Commercial	48,884	84,060	35,176	71.96%	0.80%	0.81%
11	1.5 Inch	Commercial	150,893	259,380	108,487	71.90%	2.48%	2.50%
12	2 Inch	Commercial	280,522	482,054	201,532	71.84%	4.61%	4.65%
13	3 Inch	Commercial	71,578	122,990	51,412	71.83%	1.18%	1.19%
14	4 Inch	Commercial	71,802	123,331	51,529	71.77%	1.18%	1.19%
15	6 Inch	Commercial	203,846	350,119	146,273	71.76%	3.35%	3.38%
16	1 Inch	Irrigation	339	584	244	72.00%	0.01%	0.01%
17	1.5 Inch	Irrigation	98,009	168,756	70,747	72.18%	1.61%	1.63%
18	2 Inch	Irrigation	6,157	10,607	4,450	72.28%	0.10%	0.10%
19	3 Inch	Irrigation	1,142	1,965	823	72.06%	0.02%	0.02%
20	6 Inch	Irrigation	114,183	196,740	82,556	72.30%	1.88%	1.90%
21	3 Inch	Public Interruptible	3,193	5,491	2,299	72.00%	0.05%	0.05%
22	8 Inch	Public Interruptible	19	33	14	72.00%	0.00%	0.00%
23	3 Inch	Fire Protection	72	124	52	72.00%	0.00%	0.00%
24	4 Inch	Fire Protection	5,814	10,000	4,186	72.00%	0.10%	0.10%
25	6 Inch	Fire Protection	7,150	12,298	5,148	72.00%	0.12%	0.12%
26	8 Inch	Fire Protection	2,480	4,266	1,786	72.00%	0.04%	0.04%
27	Standby		2,646	4,551	1,905	72.00%	0.04%	0.04%
28	Miscellaneous Revenues		113,419	113,419	-	0.00%	1.87%	1.09%
29	**Subtotal of Water Revenues**		$6,079,178	$10,370,936	$4,291,758	70.60%	100.00%	100.00%
30								
31								
32				Revenue Annualization (a)				
33			Present	Proposed	Dollar	Percent	Additional Bills to be	Gallons to be Pumped
34			Revenues	Revenues	Change	Change	Issued	(In 1,000's)
35	5/8 Inch	Residential	10,636	18,306	7,669	72.11%	1,004	7,612
36	1 Inch	Residential	404	695	291	71.93%	9	327
37	1.5 Inch	Residential	1,046	1,797	751	71.85%	9	878
38	2 Inch	Residential	5,905	10,148	4,244	71.87%	49	4,522
39	5/8 Inch	Commercial	421	724	303	72.10%	42	293
40	3/4 Inch	Commercial	(70)	(120)	(50)	72.09%	(6)	(53)
41	1 Inch	Commercial	(343)	(590)	(247)	72.01%	(11)	(236)
42	1.5 Inch	Commercial	863	1,484	621	71.94%	14	535
43	2 Inch	Commercial	5,008	8,605	3,597	71.84%	32	4,070
44	3 Inch	Commercial	(3,159)	(5,429)	(2,270)	71.85%	(15)	**(2,317)**
45	1.5 Inch	Irrigation	(4)	(6)	(3)	72.31%	-	(4)
46	2 Inch	Irrigation	(594)	(1,024)	(429)	72.27%	(2)	(788)
47	3 Inch	Irrigation	(97)	(167)	(70)	72.09%	(1)	**(42)**
48	6 Inch	Irrigation	83,116	143,212	60,096	72.30%	8	126,136
49	3 Inch	Public Interruptible	(3,193)	(5,491)	(2,299)	72.00%	(13)	**(6,385)**
50	4 Inch	Fire Protection	126	217	91	72.00%	14	
51	6 Inch	Fire Protection	200	344	144	72.00%	16	
52	8 Inch	Fire Protection	(80)	(138)	(58)	72.00%	(4)	
53	Total Water Annualization		100,185	172,568	72,382	72.25%	1,145	134,549
54	Total Water Revenues with Annualization		6,179,363	10,543,503	4,364,140	70.62%		

55 **(a)** Customer Growth Annualization is calculated by computing the change in the number of customers by month from
56 the beginning of the year to the end of the year, and then multipling the additional customers times the average
57 revenue for that month.

Arizona American - Sun City
Test Year Ended December 31, 2001
Analysis of Revenue by Detailed Class at Average Usage

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.		Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	19,214	8,361	$ 11.17	$ 19.23	8.06	72.13%
2	3/4 Inch	Residential	8	15,869	18.08	31.09	13.01	71.98%
3	1 Inch	Residential	117	38,788	47.17	81.09	33.92	71.92%
4	1.5 Inch	Residential	1,312	73,721	94.30	162.08	67.78	71.87%
5	2 Inch	Residential	425	91,864	123.99	213.10	89.11	71.87%
6	3 Inch	Residential	3	-	-	-	-	0.00%
7	4 Inch	Residential	-	-	-	-	-	0.00%
8	6 Inch	Residential	2	137,292	$ 265.79	$ 456.88	191.09	71.90%
9	5/8 Inch	Commercial	198	7,054	10.15	17.47	7.32	72.11%
10	3/4 Inch	Commercial	21	-	-	-	-	0.00%
11	1 Inch	Commercial	126	22,247	31.95	54.95	23.00	72.00%
12	1.5 Inch	Commercial	181	46,341	69.11	118.82	49.71	71.92%
13	2 Inch	Commercial	155	120,339	150.19	258.09	107.90	71.84%
14	3 Inch	Commercial	23	204,111	256.26	440.34	184.07	71.83%
15	4 Inch	Commercial	5	1,190,450	1,196.69	2,055.51	858.82	71.77%
16	6 Inch	Commercial	7	2,486,155	2,426.74	4,168.08	1,741.34	71.76%
17	1 Inch	Irrigation	2	77	13.05	22.45	9.40	72.00%
18	1.5 Inch	Irrigation	117	64,318	13.05	22.45	9.40	72.00%
19	2 Inch	Irrigation	1	613,500	13.05	22.45	9.40	72.00%
20	3 Inch	Irrigation	1	27,462	13.05	22.45	9.40	72.00%
21	4 Inch	Irrigation	-	-	-	-	-	0.00%
22	6 Inch	Irrigation	1	10,762,250	7,136.46	12,296.24	5,159.78	72.30%
23	3 Inch	Public Interruptible	1	491,154	245.58	422.39	176.82	72.00%
24	8 Inch	Public Interruptible	1	3,167	1.58	2.72	1.14	72.00%
25	3 Inch	Fire Protection	1	-	6.00	10.32	4.32	72.00%
26	4 Inch	Fire Protection	54	-	9.00	15.48	6.48	72.00%
27	6 Inch	Fire Protection	48	-	12.50	21.50	9.00	72.00%
28	8 Inch	Fire Protection	10	-	20.00	34.40	14.40	72.00%
29	10 Inch	Fire Protection	-	-	-	-	-	0.00%
30	Standby		63	-	3.50	6.02	2.52	72.00%
31								
32		Totals	22,098					
33								
34		Actuall Year End Number						
35		of Customers:	22,195					
36								
37		**(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.						

Arizona American - Sun City
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1	Percentage Increase in Monthly Minimums				
2	Percentage Increase in Commodity Rates				
3					
4	**Monthly Usage Charge for:**				
5	Residential,Commercial				
6	5/8 x 3/4 Inch	Rounded Down by $0.02	$ 5.00	$ 8.58	71.60%
7	3/4 Inch	Rounded Down by $0.02	5.00	8.58	71.60%
8	1 Inch		13.00	22.36	72.00%
9	1 1/2 Inch		28.00	48.16	72.00%
10	2 Inch		41.00	70.52	72.00%
11	3 Inch		70.00	120.40	72.00%
12	4 Inch		103.00	177.16	72.00%
13	6 Inch		141.00	242.52	72.00%
14					
15	Private Fire Protection				
16	Flat Rate 3		6.00	10.32	72.00%
17	Flat Rate 4		9.00	15.48	72.00%
18	Flat Rate 6		12.50	21.50	72.00%
19	Flat Rate 8		20.00	34.40	72.00%
20	Flat Rate 10		30.00	51.60	72.00%
21	Standby				
22	Public Interruptible		3.50	6.02	72.00%
23	Irrigation				
24	1 Inch		13.00	22.36	72.00%
25	1 1/2 Inch		28.00	48.16	72.00%
26	2 Inch		41.00	70.52	72.00%
27	3 Inch		70.00	120.40	72.00%
28	4 Inch		103.00	177.16	72.00%
29	6 Inch		141.00	242.52	72.00%
30					
31					
32	Gallons In Minimum				
33	All		-	-	
34					
35					
36					
37					
38	**Tier 1:** Gallons upper limit				
39	All, except construction, irrigation, public interruptible		8,000	8,000	
40	Construction		999,999,999	999,999,999	
41	Irrigation		999,999,999	999,999,999	
42	Public Interruptible		999,999,999	999,999,999	
43					
44	In Addition to above charges, Company shall collect Groundwater Saving Fee Per Commission				
45	Decision 62293				
46					
47	(a) Rounded to nearest whole cent				

Arizona American - Sun City
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Kozoman

Line No.	Customer Classification and Meter Size	Present Rates	Proposed Rates	Percent Change
1				
2				
3	**Tier 2:** (Gallon upper limit, up to, but not exceeding)			
4	All, except construction, irrigation, public interruptible	999,999,999	999,999,999	
5	Construction	999,999,999	999,999,999	
6	Irrigation	999,999,999	999,999,999	
7	Public Interruptible	999,999,999	999,999,999	
8				
9				
10	**Tier 3:** (Gallon over)			
11	All, except construction, irrigation, public interruptible	999,999,999	999,999,999	
12	Construction	999,999,999	999,999,999	
13	Irrigation	999,999,999	999,999,999	
14	Public Interruptible	999,999,999	999,999,999	
15				
16				
17	Commodity Rates (per 1,000 gallons over minimum and per Tier)			
18	All, except construction, irrigation, public interruptible Tier 1 (a)	$ 0.73	$ 1.26	72.60%
19	All, except construction, irrigation, public interruptible Tier 1 (a)	0.92	1.58	71.74%
20	All, except construction, irrigation, public interruptible Tier 1 (a)	0.92	1.58	71.74%
21	All, except construction, irrigation, public interruptible Tier 1 (a)			
22				
23				
24	Construction / Untreated CAP	$ 0.50	$ 0.86	72.00%
25				
26	Irrigation	$ 0.65	$ 1.12	72.31%
27				
28	Public Interruptible	$ 0.50	$ 0.86	72.00%
29				
30	Groundwater Withdrawal Assessment			
31	Groundwater Withdrawal Fees shall be collected as an assessment, and is subject to annual			
32	revisions as required due to changes in rates charged by the Arizona Department of Water			
33	Resources ("ADWR"). Includes an allowance of 10% lost and unaccounted for water.			
34				
35	(a) Rounded to nearest whole cent			

Arizona American - Sun City
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates	
1	Establishment	$ 30.00	$ 30.00	
2	Establishment (After Hours)	$ 40.00	$ 40.00	
3	Reconnection (Deliquent)			
4	Reconnection (After Hours)			
5	Meter Test	$ 10.00	$ 10.00	
6	Deposit	**	**	
7	Deposit Interest	**	**	
8	Re-Establishment (With-in 12 Months)	***	***	
9				
10	NSF Check	$ 10.00	$ 10.00	
11	Deferred Payment, Per Month (b)	1.50%	1.50%	
12	Meter Re-Read	$ 5.00	$ 5.00	
13	Charge of Moving Customer Meter -			
14	Customer Requested	Cost	Cost	
15	Late Payment Charge, on balance of Acct.	1.50%	1.50%	
16	Damages to Meter Locks, Valves, Seals	Cost	Cost	(2)
17	Sprinklers			

(1) Greater of 1.50% or $5.00 Present Rates or 1.5% or $10.00 Proposed Rates.
(2) $40.00 plus actual cost of making repairs.
** PER COMMISSION RULES (R14-2-403.B)
*** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)
IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE TAX. PER COMMISSION RULE (14-2-409.D 5)
ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.
(a) 1.00% of the monthly minimum for a comparable sized meter connection, but no less than $5 per month

	Present Charges Service Charges Installation of		
Meter Size	Ser. Line	Meter	Proposed Charges(*)
5/8 x 3/4 Inch	$ 255.00	$ 65.00	$500
3 / 4 Inch	$ 255.00	$ 105.00	$575
1 Inch	$ 275.00	$ 145.00	$660
1 1/2 Inch	$ 290.00	$ 345.00	$900
2 Inch	$ 315.00	$ 775.00	$2,220
3 Inch	Cost	Cost	Cost
4 Inch	Cost	Cost	Cost
6 Inch	Cost	Cost	Cost
8 Inch	Cost	Cost	Cost
Meters Larger than 8"	Cost	Cost	Cost

As meters and service lines are now taxable income for income purposes, The Company shall collect income taxes on the meter and service line charges.
Any tax collected will be refunded each year that the meter deposit is refunded.

Company will not accept applications for new 3/4" meters after May 1, 1997. This meter size is obsolute.

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Summary of Revenues by Customer Classification - Present and Proposed Rates
With Annualized Revenues to Year End Number of Customers
Step-One Increase

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Meter Size	Customer Classification	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8 Inch	Residential	$2,662,562	$ 3,725,889	$1,063,327	39.94%	43.80%	44.00%
2	3/4 Inch	Residential	1,817	2,544	727	40.03%	0.03%	0.03%
3	1 Inch	Residential	66,498	93,164	26,666	40.10%	1.09%	1.10%
4	1.5 Inch	Residential	1,485,121	2,080,990	595,869	40.12%	24.43%	24.58%
5	2 Inch	Residential	632,378	886,106	253,728	40.12%	10.40%	10.46%
6	3 Inch	Residential	13,103	18,367	5,263	40.17%	0.22%	0.22%
7	6 Inch	Residential	6,383	8,943	2,559	40.09%	0.11%	0.11%
8	5/8 Inch	Commercial	25,941	36,323	10,383	40.02%	0.43%	0.43%
9	3/4 Inch	Commercial	3,226	4,518	1,292	40.05%	0.05%	0.05%
10	1 Inch	Commercial	48,884	68,469	19,585	40.06%	0.80%	0.81%
11	1.5 Inch	Commercial	150,893	211,401	60,508	40.10%	2.48%	2.50%
12	2 Inch	Commercial	280,522	393,124	112,602	40.14%	4.61%	4.64%
13	3 Inch	Commercial	71,578	100,316	28,738	40.15%	1.18%	1.18%
14	4 Inch	Commercial	71,802	100,663	28,862	40.20%	1.18%	1.19%
15	6 Inch	Commercial	203,846	285,800	81,954	40.20%	3.35%	3.38%
16	1 Inch	Irrigation	339	475	136	40.00%	0.01%	0.01%
17	1.5 Inch	Irrigation	98,009	137,213	39,204	40.00%	1.61%	1.62%
18	2 Inch	Irrigation	6,157	8,620	2,463	40.00%	0.10%	0.10%
19	3 Inch	Irrigation	1,142	1,599	457	40.00%	0.02%	0.02%
20	6 Inch	Irrigation	114,183	159,857	45,673	40.00%	1.88%	1.89%
21	3 Inch	Public Interruptible	3,193	4,470	1,277	40.00%	0.05%	0.05%
22	8 Inch	Public Interruptible	19	27	8	40.00%	0.00%	0.00%
23	3 Inch	Fire Protection	72	101	29	40.00%	0.00%	0.00%
24	4 Inch	Fire Protection	5,814	8,140	2,326	40.00%	0.10%	0.10%
25	6 Inch	Fire Protection	7,150	10,010	2,860	40.00%	0.12%	0.12%
26	8 Inch	Fire Protection	2,480	3,472	992	40.00%	0.04%	0.04%
27	Standby		2,646	3,704	1,058	40.00%	0.04%	0.04%
28	Miscellaneous Revenues		113,419	113,419	-	0.00%	1.87%	1.34%
29		**Total Water Revenues**	$6,079,178	$ 8,467,722	$2,388,544	39.29%	98.13%	98.66%
30								
31								
32				**Revenue Annualization (a)**				
33			Present	Proposed	Dollar	Percent	Additional Bills to be	Gallons to be Pumped
34			Revenues	Revenues	Change	Change	Issued	(In 1,000's)
35	5/8 Inch	Residential	10,636	14,877	4,241	39.87%	1,004	7,612
36	1 Inch	Residential	404	566	162	40.09%	9	327
37	1.5 Inch	Residential	1,046	1,465	420	40.14%	9	878
38	2 Inch	Residential	5,905	8,274	2,369	40.12%	49	4,522
39	5/8 Inch	Commercial	421	589	168	39.86%	42	293
40	3/4 Inch	Commercial	(70)	(98)	(28)	39.89%	(6)	(53)
41	1 Inch	Commercial	(343)	(481)	(137)	40.03%	(11)	(236)
42	1.5 Inch	Commercial	863	1,209	346	40.07%	14	535
43	2 Inch	Commercial	5,008	7,018	2,010	40.14%	32	4,070
44	3 Inch	Commercial	(3,159)	(4,427)	(1,268)	40.13%	(15)	(2,317)
45	1.5 Inch	Irrigation	(4)	(5)	(1)	40.00%	-	(4)
46	2 Inch	Irrigation	(594)	(832)	(238)	40.00%	(2)	(788)
47	3 Inch	Irrigation	(97)	(136)	(39)	40.00%	(1)	(42)
48	6 Inch	Irrigation	83,116	116,363	33,247	40.00%	8	126,136
49	3 Inch	Public Interruptible	(3,193)	(4,470)	(1,277)	40.00%	(13)	(6,385)
50	4 Inch	Fire Protection	126	176	50	40.00%	14	
51	6 Inch	Fire Protection	200	280	80	40.00%	16	
52	8 Inch	Fire Protection	(80)	(112)	(32)	40.00%	(4)	
53		Totals	100,185	140,257	40,072	40.00%	1,145	134,549
54	Total Water Revenues with Annualization		6,179,363	8,607,979	2,428,616	39.30%		

55 **(a)** Customer Growth Annualization is calculated by computing the change in the number of customers by month from
56 the beginning of the year to the end of the year, and then multipling the additional customers times the average
57 revenue for that month.

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Analysis of Revenue by Detailed Class at Average Usage
Step-One Increase

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.		Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	19,214	8,361	$ 11.17	$ 15.63	4.45	39.86%
2	3/4 Inch	Residential	8	15,869	18.08	25.31	7.23	40.00%
3	1 Inch	Residential	117	38,788	47.17	66.08	18.91	40.10%
4	1.5 Inch	Residential	1,312	73,721	94.30	132.14	37.84	40.12%
5	2 Inch	Residential	425	91,864	123.99	173.74	49.75	40.12%
6	3 Inch	Residential	3	-	-	-	-	0.00%
7	4 Inch	Residential	-	-	-	-	-	0.00%
8	6 Inch	Residential	2	137,292	$ 265.79	$ 372.35	106.56	40.09%
9	5/8 Inch	Commercial	198	7,054	10.15	14.20	4.05	39.86%
10	3/4 Inch	Commercial	21	-	-	-	-	0.00%
11	1 Inch	Commercial	126	22,247	31.95	44.74	12.79	40.04%
12	1.5 Inch	Commercial	181	46,341	69.11	96.82	27.71	40.09%
13	2 Inch	Commercial	155	120,339	150.19	210.48	60.29	40.14%
14	3 Inch	Commercial	23	204,111	256.26	359.14	102.88	40.15%
15	4 Inch	Commercial	5	1,190,450	1,196.69	1,677.72	481.03	40.20%
16	6 Inch	Commercial	7	2,486,155	2,426.74	3,402.38	975.64	40.20%
17	1 Inch	Irrigation	2	77	13.05	18.27	5.22	40.00%
18	1.5 Inch	Irrigation	117	64,318	13.05	18.27	5.22	40.00%
19	2 Inch	Irrigation	1	613,500	13.05	18.27	5.22	40.00%
20	3 Inch	Irrigation	1	27,462	13.05	18.27	5.22	40.00%
21	4 Inch	Irrigation	-	-	-	-	-	0.00%
22	6 Inch	Irrigation	1	10,762,250	7,136.46	9,991.05	2,854.59	40.00%
23	3 Inch	Public Interruptible	1	491,154	245.58	343.81	98.23	40.00%
24	8 Inch	Public Interruptible	1	3,167	1.58	2.22	0.63	40.00%
25	3 Inch	Fire Protection	1	-	6.00	8.40	2.40	40.00%
26	4 Inch	Fire Protection	54	-	9.00	12.60	3.60	40.00%
27	6 Inch	Fire Protection	48	-	12.50	17.50	5.00	40.00%
28	8 Inch	Fire Protection	10	-	20.00	28.00	8.00	40.00%
29	10 Inch	Fire Protection	-	-	-	-	-	0.00%
30	Standby		63	-	3.50	4.90	1.40	40.00%
31								
32		Totals	22,098					
33								
34		Actuall Year End Number						
35		of Customers:	22,195					
36								
37		**(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.						

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Changes in Representative Rate Schedules
Step-One Increase

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size	Present Rates	Proposed Rates	Percent Change	Increase Percentage
1	Percentage Increase in Monthly Minimums				
2	Percentage Increase in Commodity Rates				
3					
4	**Monthly Usage Charge for:**				
5	Residential,Commercial				
6	5/8 x 3/4 Inch	$ 5.00	$ 7.00	40.00%	$ 7.0000
7	3/4 Inch	5.00	7.00	40.00%	$ 7.0000
8	1 Inch	13.00	18.20	40.00%	$ 18.2000
9	1 1/2 Inch	28.00	39.20	40.00%	$ 39.2000
10	2 Inch	41.00	57.40	40.00%	$ 57.4000
11	3 Inch	70.00	98.00	40.00%	$ 98.0000
12	4 Inch	103.00	144.20	40.00%	$144.2000
13	6 Inch	141.00	197.40	40.00%	$197.4000
14	8 Inch				
15	Private Fire Protection				
16	Flat Rate 3	6.00	8.40	40.00%	$ 8.4000
17	Flat Rate 4	9.00	12.60	40.00%	$ 12.6000
18	Flat Rate 6	12.50	17.50	40.00%	$ 17.5000
19	Flat Rate 8	20.00	28.00	40.00%	$ 28.0000
20	Flat Rate 10	30.00	42.00	40.00%	$ 42.0000
21	Standby				
22	Public Interruptible	3.50	4.90	40.00%	$ 4.9000
23	Irrigation				
24	1 Inch	13.00	18.20	40.00%	$ 18.2000
25	1 1/2 Inch	28.00	39.20	40.00%	$ 39.2000
26	2 Inch	41.00	57.40	40.00%	$ 57.4000
27	3 Inch	70.00	98.00	40.00%	$ 98.0000
28	4 Inch	103.00	144.20	40.00%	$144.2000
29	6 Inch	141.00	197.40	40.00%	$197.4000
30					
31					
32	Gallons In Minimum				
33	All	-	-		
34					
35					
36					
37					
38	**Tier 1:** Gallons upper limit				
39	All, except construction, irrigation, public interruptible	8,000	8,000		
40	Construction	999,999,999	999,999,999		
41	Irrigation	999,999,999	999,999,999		
42	Public Interruptible	999,999,999	999,999,999		
43					
44	In Addition to above charges, Company shall collect Groundwater Saving Fee Per Commission Decision				
45	62293				
46					
47	(a) Rounded to the nearest whole cent				

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Changes in Representative Rate Schedules
Step-One Increase

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Kozoman

Line No.	Customer Classification and Meter Size	Present Rates	Proposed Rates	Percent Change
1				
2				
3	**Tier 2:** (Gallon upper limit, up to, but not exceeding)			
4	All, except construction, irrigation, public interruptible	999,999,999	999,999,999	
5	Construction	999,999,999	999,999,999	
6	Irrigation	999,999,999	999,999,999	
7	Public Interruptible	999,999,999	999,999,999	
8				
9				
10	**Tier 3:** (Gallon over)			
11	All, except construction, irrigation, public interruptible	999,999,999	999,999,999	
12	Construction	999,999,999	999,999,999	
13	Irrigation	999,999,999	999,999,999	
14	Public Interruptible	999,999,999	999,999,999	
15				
16				
17	Commodity Rates (per 1,000 gallons over minimum and per Tier)			
18	All, except construction, irrigation, public interruptib Tier 1 (a)	$ 0.73	$ 1.02	39.73% $ 1.0220
19	All, except construction, irrigation, public interruptib Tier 2 (a)	0.92	1.29	40.22% $ 1.2880
20	All, except construction, irrigation, public interruptib Tier 3 (a)	0.92	1.29	40.22% $ 1.2880
21	All, except construction, irrigation, public interruptib Tier 4			
22				
23				
24	Construction / Untreated CAP	$ 0.50	$ 0.7000	40.00% $ 0.7000
25				
26	Irrigation	$ 0.65	$ 0.91	40.00% $ 0.9100
27				
28	Public Interruptible	$ 0.50	$ 0.70	40.00% $ 0.7000
29				
30	Groundwater Withdrawal Assessment			
31	Groundwater Withdrawal Fees shall be collected as an assessment, and is subject to annual			
32	revisions as required due to changes in rates charged by the Arizona Department of Water			
33	Resources ("ADWR"). Includes an allowance of 10% lost and unaccounted for water.			

Arizona American - Sun City Water
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001
Step-One Increase

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates	
1	Establishment	$ 30.00	$ 30.00	
2	Establishment (After Hours)	$ 40.00	$ 40.00	
3	Reconnection (Deliquent)		$ -	
4	Reconnection (After Hours)		$ -	
5	Meter Test	$ 10.00	$ 10.00	
6	Deposit	**	**	
7	Deposit Interest	**	**	
8	Re-Establishment (With-in 12 Months)	***	***	
9			$ -	
10	NSF Check	$ 10.00	$ 10.00	
11	Deferred Payment, Per Month (b)	1.50%	1.50%	
12	Meter Re-Read	$ 5.00	$ 5.00	
13	Charge of Moving Customer Meter -		$ -	
14	Customer Requested	Cost	Cost	
15	Late Payment Charge, on balance of Acct.	1.50%	1.50%	
16	Damages to Meter Locks, Valves, Seals	Cost	Cost	(2)
17	Sprinklers			

(1) Greater of 1.50% or $5.00 Present Rates or 1.5% or $10.00 Proposed Rates.
(2) $40.00 plus actual cost of making repairs.
** PER COMMISSION RULES (R14-2-403.B)
*** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)
IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE TAX. PER COMMISSION RULE (14-2-409.D 5)
ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.
(a) 1.00% of the monthly minimum for a comparable sized meter connection, but no less than $5 per month.

	Present Charges		
	Service Charges		
	Installation of		Proposed
Meter Size	Ser. Line	Meter	Charges(*)
5/8 x 3/4 Inch	$ 255.00	$ 65.00	$500
3 / 4 Inch	$ 255.00	$ 105.00	$575
1 Inch	$ 275.00	$ 145.00	$660
1 1/2 Inch	$ 290.00	$ 345.00	$900
2 Inch	$ 315.00	$ 775.00	$2,220
3 Inch	Cost	Cost	Cost
4 Inch	Cost	Cost	Cost
6 Inch	Cost	Cost	Cost
8 Inch	Cost	Cost	Cost
Meters Larger than 8"	Cost	Cost	Cost

As meters and service lines are now taxable income for income purposes, The Company shall collect income taxes on the meter and service line charges.
Any tax collected will be refunded each year that the meter deposit is refunded.

Company will not accept applications for new 3/4" meters after May 1, 1997. This meter size is obsolute.

SUN CITY
WASTEWATER DIVISION

Arizona American - Sun City Wastewater
Summary of Revenues by Customer Classification - Present and Proposed Rates
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	Residential Units (SSR)	$ 2,920,525	$ 3,102,065	$ 181,540	6.22%	57.78%	57.78%
2	Commercial/Residential Units (SSR)	116	123	7	6.22%	0.00%	0.00%
3	Commercial (SSC)	104,865	111,377	6,512	6.21%	2.07%	2.07%
4	Commercial Large User (SS6)	64,965	69,153	4,188	6.45%	1.29%	1.29%
5	Multi-family Residential Units (AC SSR)	1,793,100	1,904,559	111,459	6.22%	35.47%	35.47%
6	Commercial additional toilets (SS1)	133,438	141,910	8,472	6.35%	2.64%	2.64%
7	Commercial per dishwasher (SS2)	26,568	28,221	1,653	6.22%	0.53%	0.53%
8	Commercial per wash machine (SS3)	5,457	5,790	332	6.09%	0.11%	0.11%
9	Commercial per wash rack (SS4)	2,736	2,907	171	6.25%	0.05%	0.05%
10	Miscellaneous Revenues	2,859	2,859	-	0.00%	0.06%	0.05%
11	**Subtotal of Revenues**	$ 5,054,629	$ 5,368,963	$ 314,334	6.22%	100.00%	100.00%
12							
13							

14		Present	Proposed	Dollar	Percent	Bills to be
15	**Revenue Annualization**	Revenues	Revenues	Change	Change	Issued
16	Residential Units (SSR)	12,754	13,547	$ 793	6.22%	991
17	Commercial/Residential Units (SSR)	(116)	(123)	(7)	6.22%	(9)
18	Commercial (SSC)	1,809	1,921	112	6.21%	117
19	Commercial Large User (SS6)	-	-	-		-
20	Multi-family Residential Units (AC SSR)	17,709	18,810	1,101	6.22%	1,376
21	Commercial additional toilets (SS1)	329	350	21	6.35%	87
22	Commercial per dishwasher (SS2)	669	711	42	6.22%	23
23	Commercial per wash machine (SS3)	49	52	3	6.09%	7
24	Commercial per wash rack (SS4)	29	31	2	6.25%	2
25	Total Revenue Annualization	33,233	35,299	2,066	6.22%	2,594
26						
27	**Total of Revenues**	5,087,862	5,404,262	316,400	6.22%	

Arizona American - Sun City Wastewater
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	Residential Units (SSR)	18,910	N/A	12.87	13.67	0.80	6.22%
2	Commercial/Residential Units (SSR)	1	N/A	12.87	13.67	0.80	6.22%
3	Commercial Large User (SS6)	4	1,080,156	1,347.39	1,434.25	86.85	6.45%
4	Multi-family Residential Units (AC SSR)	11,610	N/A	12.87	13.67	0.80	6.22%
5	Commercial additional toilets (SS1)	2,942	N/A	3.78	4.02	0.24	6.35%
6	Commercial per dishwasher (SS2)	76	N/A	29.10	30.91	1.81	6.22%
7	Commercial per wash machine (SS3)	64	N/A	7.06	7.49	0.43	6.09%
8	Commercial per wash rack (SS4)	16	N/A	14.40	15.30	0.90	6.25%
9							
10							
11	Totals	33,624					
12							
13	Actual Year End Number						
14	of Customers:	33,830					
15							
16	**(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.						
17							

Arizona American - Sun City Wastewater
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size	Present Rates	Proposed Rates	Percent Change
1				
2				
3				
4	**Monthly Usage Charge for:**			
5	Residential and Commercial			
6	Residential (SSR) (a)	$ 12.87	$ 13.67	6.22%
7	Commercial (SSC) (a)	15.46	16.42	6.21%
8	Commercial Large User (SS6 based on consumption)	32.80	34.84	6.22%
9	SS1 (commercial, additonal toilets) (a)	3.78	4.02	6.35%
10	SS2 (commercial restaurant, per dishwasher or garbage grinder) (a)	29.10	30.91	6.22%
11	SS3 (commercial laundromat, per washing machine) (a)	7.06	7.49	6.09%
12	SS4 (commercial, per wash rack)	14.40	15.30	6.25%
13	Rental Rooms (a)	7.99	8.49	6.26%
14	Paradise Resort Park, Contract Rate	3.94	3.94	0.00%
15				
16	Gallons In Minimum			
17	Commercial SSR6 & Paradise Park Resort	20,000	20,000	
18				
19	Commodity Rates (per 1,000 gallons over minimum)			
20	Commercial SSR6 & Paradise Park Resort (a)	$ 1.24	$ 1.32	6.45%
21				
22	**Annual Fee for Industrial Discharge Service**			
23	For those customers consuming an amount of water less than or equal			
24	50,000 gallons per month through one or more water meters to the			
25	same facility, inclusive of meters used for irrigation:	$ 500.00	$ 500.00	
26				
27				
28	For those customers consuming an amount of water greater than			
29	50,000 gallons per month through one or more water meters to the			
30	same facility, inclusive of meters used for irrigation:	$ 1,000.00	$ 1,000.00	
31				
32	Annual Fee for Industrial Discharge Service charges shall be non-refundable and shall be assessed			
33	in advance each January by the Company by special billing. For new customers receiving this service,			
34	a prorated charge shall be assessed.			
35				
36	(a) Rounded to the nearest whole cent			
37				

Arizona American - Sun City Wastewater
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates
1	Establishment		
2	Establishment (After Hours)		
3	Reconnection (Deliquent)		
4	Reconnection (After Hours)		
5			
6	Deposit	**	**
7	Deposit Interest	**	**
8	Re-Establishment (With-in 12 Months)	***	***
9			
10	NSF Check		
11	Deferred Payment, Per Month		
12			
13			
14			
15	Late Payment Charge	1.50%	1.50%
16			
17	Rates for above charges are listed on Schedule H-3, Page 3 of Sun City Water.		
18			
19			
20	** PER COMMISSION RULES (R14-2-403.B)		
21	*** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)		
22	IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM		
23	ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE		
24	TAX. PER COMMISSION RULE (14-2-409.D 5)		
25	ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,		
26	AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.		

SUN CITY WEST
WATER DIVISION

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Present Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-1
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and Revenue Annualizations	3,327,909	2,088,189	409	73,821	586,696	376,549	47,070	133,331	16,803	5,040	-
Misc. Revenue **(a)**	37,640	37,640									
Total Revenues	3,365,549	2,125,829	409	73,821	586,696	376,549	47,070	133,331	16,803	5,040	-
Operating Expenses **(b)**	1,789,732	1,319,128	175	30,573	195,584	142,312	16,125	45,301	28,939	11,596	-
Depreciation and Amortization **(b)**	758,769	578,396	52	12,813	66,868	51,778	5,305	9,738	23,210	10,608	-
Property Tax **(c)**	142,181	89,808	17	3,119	24,786	15,908	1,989	5,633	710	213	-
Income Tax **(d)**	135,058	(60,146)	58	9,098	113,016	60,497	8,984	28,412	(16,941)	(7,921)	-
Total Operating Expenses	2,825,740	1,927,187	302	55,602	400,253	270,495	32,402	89,084	35,918	14,497	-
Operating Income	539,809	198,643	107	18,219	186,443	106,054	14,668	44,247	(19,115)	(9,457)	-
Interest Expense **(e)**	340,191	287,539	21	4,772	19,404	16,638	1,389	2,253	5,924	2,251	-
Net Income	199,617	(88,896)	86	13,446	167,039	89,416	13,279	41,994	(25,039)	(11,707)	-
Rate Base **(f)**	12,063,369	10,196,286	748	169,235	688,080	589,996	49,241	79,902	210,073	79,808	-
Rate of Return **(g)**	4.47%	1.95%	14.26%	10.77%	27.10%	17.98%	29.79%	55.38%	-9.10%	-11.85%	

(a) Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	334,675										
Percent of Taxable Income		-44.53%	0.04%	6.74%	83.68%	44.79%	6.65%	21.04%	-12.54%	-5.86%	0.00%
Income Tax		135,058	135,058	135,058	135,058	135,058	135,058	135,058	135,058	135,058	135,058
Allocated Income Tax		(60,146)	58	9,098	113,016	60,497	8,984	28,412	(16,941)	(7,921)	-
Income Tax											
Property Tax Allocation	142,181	63.16%	0.01%	2.19%	17.43%	11.19%	1.40%	3.96%	0.50%	0.15%	0.00%
Property Tax Allocation	142,181	89,808	17	3,118.66	24,785.57	15,907.72	1,988.52	5,632.69	709.85	212.92	-

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Proposed Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-2
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and Revenue Annualizations **(1)**	3,735,016	2,280,793	453	82,970	666,029	441,869	58,990	179,025	19,247	5,639	
Misc. Revenue **(a)**	37,640	37,640									
Total Revenues	3,772,656	2,318,433	453	82,970	666,029	441,869	58,990	179,025	19,247	5,639	-
Operating Expenses **(b)**	1,789,732	1,319,128	175	30,573	195,584	142,312	16,125	45,301	28,939	11,596	-
Depreciation and Amortization **(b)**	758,769	578,396	52	12,813	66,868	51,778	5,305	9,738	23,210	10,608	-
Property Tax **(c)**	142,181	87,375	17	3,127	25,101	16,653	2,223	6,747	725	213	-
Income Tax **(d)**	285,141	17,680	72	12,180	138,028	82,449	13,050	44,201	(15,204)	(7,315)	-
Total Operating Expenses	2,975,824	2,002,580	317	58,693	425,580	293,192	36,703	105,986	37,670	15,102	-
Operating Income	796,832	315,853	137	24,277	240,449	148,677	22,288	73,039	(18,424)	(9,463)	-
Interest Expense **(e)**	340,191	287,539	21	4,772	19,404	16,638	1,389	2,253	5,924	2,251	-
Net Income	456,641	28,314	116	19,505	221,045	132,039	20,899	70,786	(24,348)	(11,714)	-
Rate Base **(f)**	12,063,369	10,196,286	748	169,235	688,080	589,996	49,241	79,902	210,073	79,808	-
Rate of Return **(g)**	6.61%	3.10%	18.29%	14.35%	34.94%	25.20%	45.26%	91.41%	-8.77%	-11.86%	
Percent of Total Customers		93.434%	0.006%	1.155%	3.402%	1.624%	0.090%	0.096%	0.148%	0.045%	0.000%

(1) Revenues are from ACC Staff Proposed Rates Bill Count.
(a) Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	741,783										
Percent of Taxable Income		6%	0%	4%	48%	29%	5%	16%	-5%	-3%	0%
Income Tax		285,141	285,141	285,141	285,141	285,141	285,141	285,141	285,141	285,141	285,141
Allocated Income Tax		17,680	72	12,180	138,028	82,449	13,050	44,201	(15,204)	(7,315)	-
Percent of Revenues		61.45%	0.01%	2.20%	17.65%	11.71%	1.56%	4.75%	0.51%	0.15%	0.00%
Property Tax Allocation	142,181	87,375	17	3,127	25,101	16,653	2,223	6,747	725	213	-

Arizona American - Sun City West Water
Test Year Ended December 31, 2000
Cost of Service Study Using Commodity / Demand Method
Allocation of Assets to Customer Classes Using ACC Staff Net Plant

Exhibit
Rebuttal Schedule G-3
Page 1
Witness: Kozoman

Line No.		Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
1	Plant, Minus Accumulated Depreciation, Advances and Contributions in Aid and Meter Deposits (from Schedule G-5, Page 1)											
2	Commodity	84,860	51,951	14	1,793	15,493	9,497	1,314	4,678	120	-	-
3	Demand	1,666,178	1,102,932	114	34,093	200,767	153,341	16,971	28,410	87,125	42,426	-
4	Customer	2,098,583	1,960,797	135	24,244	71,385	34,076	1,886	2,020	3,098	943	-
5	Service	6,889,111	6,257,555	430	88,268	279,151	173,079	12,713	19,797	44,558	13,561	-
6	Meter	1,324,636	823,051	57	20,838	121,283	220,003	16,358	24,997	75,171	22,878	-
7	Totals	12,063,369	10,196,286	748	169,235	688,080	589,996	49,241	79,902	210,073	79,808	-
8												
9												
10	Commodity	-	-	-	-	-	-	-	-	-	-	-
11	Demand	-	-	-	-	-	-	-	-	-	-	-
12	Customer											
13	Service											
14	Meter											
15	Totals	-	-	-	-	-	-	-	-	-	-	-
16												
17												
18				-	-	-	-	-	-	-		
19				-	-	-	-	-	-	-	-	-
20				-	-	-	-	-	-	-		
21				-	-	-	-	-	-	-	-	-
22												
23	Net Rate Base	12,063,369	10,196,286	748	169,235	688,080	589,996	49,241	79,902	210,073	79,808	-
24												
		ACC Staff Interest Expense										
	Interest Expense Allocation	340,191	287,539	21	4,772	19,404	16,638	1,389	2,253	5,924	2,251	-
	Ratio of rate bases to total rate base		84.5227%	0.0062%	1.4029%	5.7039%	4.8908%	0.4082%	0.6624%	1.7414%	0.6616%	0.0000%

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Customer Classes Using ACC Staff Expenses

Exhibit
Rebuttal Schedule G-4
Page 1
Witness: Kozoman

	Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Operation and Maintenance Expense (from Schedule G-6, Page 1)											
Commodity	648,957	397,288	104	13,715	118,483	72,626	10,049	35,771	921	-	-
Demand	321,416	212,762	22	6,577	38,729	29,580	3,274	5,481	16,807	8,184	-
Customer	577,099	539,208	37	6,667	19,630	9,371	519	556	852	259	-
Service	67,403	61,224	4	864	2,731	1,693	124	194	436	133	-
Meter	174,857	108,646	7	2,751	16,010	29,041	2,159	3,300	9,923	3,020	-
Totals	1,789,732	1,319,128	175	30,573	195,584	142,312	16,125	45,301	28,939	11,596	-
Depreciaton Expense on Plant (from Schedule G-6, Page 2)											
Commodity	35,848	21,946	6	758	6,545	4,012	555	1,976	51	-	-
Demand	372,809	246,782	25	7,628	44,922	34,310	3,797	6,357	19,494	9,493	-
Customer	143,762	134,323	9	1,661	4,890	2,334	129	138	212	65	-
Service	164,230	149,174	10	2,104	6,655	4,126	303	472	1,062	323	-
Meter	42,121	26,172	2	663	3,857	6,996	520	795	2,390	727	-
Totals	758,769	578,396	52	12,813	66,868	51,778	5,305	9,738	23,210	10,608	-
Total Expenses (excluding Income Tax and Property Taxes)	2,548,501	1,897,525	227	43,386	262,452	194,090	21,430	55,039	52,149	22,205	-

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Rate Base by Function Using ACC Staff Plant and Accumulated Depreciation

Exhibit
Rebuttal Schedule G-5
Page 1
Witness: Kozoman

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Rate Base							
Plant minus (Accumulated Depreciation Contributions in Aid of Construction Advances in Aid of Construction and Meter Deposits)	12,063,516	1,666,178	84,860	2,098,583	1,324,636	6,889,111	12,063,369
	12,063,516	1,666,178	84,860	2,098,583	1,324,636	6,889,111	12,063,369

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Allocation of Property Taxes to Functions							
Revenue Requirement by Function	3,769,588	876,294	719,533	944,163	348,597	881,000	3,769,588
						-	-
Total Revenue Requirement	3,769,588	876,294	719,533	944,163	348,597	881,000	3,769,588
Property Taxes Allocation	142,181	33,052	27,139	35,612	13,148	33,230	142,181

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of
Construction and Meter Deposits Using ACC Staff Plant and Accumulated Depreciation to Functions

Exhibit
Rebuttal Schedule G-5
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accum. Depr. Adjustments. (Adj. 2,& 5)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible												
301.00	Organization	20,086	-		20,086	-	20,086	20,086					20,086
302.00	Franchises	1,588	-		1,588	-	1,588	1,588					1,588
303.00	Miscellaneous Intangibles	-	-		-	-	-	-					-
Total Intangible Plant		21,674	-		21,674	-	21,674						-
													-
	Source of Supply												-
310.00	Land and Land Rights	11,651	-		11,651	0	11,651	11,651					11,651
311.00	Structures and Improvements	366,091	101,401		264,690	4,284	260,406	260,406					260,406
312.00	Collecting and Impounding Res.	-	-		-	-	-	-					-
313.00	Lakes, Rivers, Other Intakes	-	-		-	-	-	-	-				-
314.00	Wells and Springs	1,307,051	297,115		1,009,936	16,462	993,474	894,127	99,347				993,474
Total Source of Supply Plant		1,684,793	398,515	-	1,286,278	20,746	1,265,531						-
													-
	Pumping												-
320.00	Land and Land Rights	44,957	-		44,957	-	44,957	44,957					44,957
321.00	Structures and Improvements	231,439	70,256		161,183	1,932	159,251	143,326	15,925				159,251
323.00	Other Power Production	-	-		-	-	-	-	-				-
325.00	Electric Pumping Equipment	5,016,788	2,031,504	(741)	2,986,025	107,380	2,878,646	2,590,781	287,865				2,878,646
326.00	Diesel Pumping Equipment	4,505	1,428		3,077	100	2,977	2,679	298				2,977
328.10	Gas Engine Pumping Equipment	1,764	512		1,252	39	1,213	1,092	121				1,213
Total Pumping Plant		5,299,453	2,103,700	(741)	3,196,493	109,450	3,087,044						-
					-								-
	Water Treatment				-								-
330.00	Land and Land Rights	-	-		-	-	-	-					-
331.00	Structures and Improvements	38,357	-		38,357	6,456	31,901	28,711	3,190				31,901
332.00	Water Treatment Equipment	150,150	(3,080)		153,230	(3,143)	156,373	140,736	15,637				156,373
Total Water Treatment Plant		188,507	(3,080)	-	191,587	3,312	188,275						-
													-
	Transmission and Distribution				-								-
340.00	Land and Land Rights	-	-		-	-	-	-					-
341.00	Structures and Improvements	-	-		-	-	-	-	-				-
342.00	Distribution, Reservoirs, & ST	769,934	151,245		618,689	5,209	613,479	552,131	61,348				613,479
343.00	Transmission and Distribution	11,750,888	2,527,298	(264)	9,223,854	89,831	9,134,023	8,220,621	913,402				9,134,023
344.00	Fire Mains	169	21		148	1	147						-
345.00	Services	6,620,399	(351,558)	(460)	6,972,417	82,081	6,890,336					6,890,336	6,890,336
346.00	Meters	1,678,135	332,448		1,345,687	21,051	1,324,636				1,324,636		1,324,636
348.00	Hydrants	1,686,428	442,355		1,244,073	16,821	1,227,252			1,227,252			1,227,252
349.00	Other Transmission & Distribution	-	-		-	-	-	-	-				-
Total Transmission and Distribution Plant		22,505,953	3,101,809	(724)	19,404,868	214,995	19,189,874						

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of Construction and Meter Deposits

Exhibit
Rebuttal Schedule G-5
Page 2a
Witness: Kozoman

		ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accumulated Depr. Adj. (Adj. 2,& 5)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
ALLOCATED COMMON PLANT													
Maricopa Common Plant													
389.00	Land and Land Rights	817	-		817	-	817	817					817
390.00	Structures and Improvements	560,392	52,031		508,361	144	508,217	508,217					508,217
391.00	Office Funiture and Equipment	269,034	60,320		208,714	645	208,069			208,069			208,069
391.10	Computer Equipment	317,767	(72,735)		390,502	1,711	388,791			388,791			388,791
392.00	Transportation Equipment	358,257	173,707		184,550	42,174	142,376	35,594		106,782			142,376
393.00	Stores Equipment	4,807	1,302		3,505	10	3,495			3,495			3,495
394.00	Tools, Shop and Garage	68,778	3,051		65,727	394	65,332			65,332			65,332
395.00	Laboratory Equipment	21,787	3,841		17,946	70	17,877			17,877			17,877
396.00	Power Operated Equipment	20,133	7,164		12,969	610	12,360	3,090		9,270			12,360
397.00	Communication Equipment	121,375	55,651		65,724	1,594	64,130	16,032		48,097			64,130
398.00	Miscellaneous Equipment	45,907	21,493	(285)	24,699	1,081	23,618			23,618			23,618
Total Common Plant		1,789,054	305,825	(285)	1,483,514	48,432	1,435,082						
					-		-	-					-
	TOTAL WATER PLANT	31,489,434	5,906,770	(1,750)	25,584,415	396,935	25,187,479	13,476,642	1,397,134	2,098,583	1,324,636	6,890,336	25,187,332
Total Plant		31,489,434			25,584,415								
	Adjustments to Accumulated Depreciation												
Company's additional Accumulated Depreciation Adjustment			396,935		(396,935)								-
			6,303,705										
	Total Net Plant				25,187,479								
	Advances in Aid of Construction				12,151,160		(12,151,160)	(10,936,044)	(1,215,116)				(12,151,160)
	Contributions in Aid of Construction				971,578		(971,578)	(874,420)	(97,158)				(971,578)
	Customer Meter Deposits				1,225		(1,225)					(1,225)	(1,225)
	Total Rate Base				12,063,516		12,063,516	1,666,178	84,860	2,098,583	1,324,636	6,889,111	12,063,369

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of ACC Staff Expenses to Functions

Exhibit
Rebuttal Schedule G-6
Page 1
Witness: Kozoman

		ACC Staff Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Salaries and Wages	(a)	392,024	110,927	12,325	185,638	83,134	-	392,024
Purchased Water		-		-				-
Purchased Power		586,268		586,268				586,268
Chemicals		20,907		20,907				20,907
Repairs and Maintenance	(b)	170,037	88,572	9,841	3,867.12	353	67,403	170,037
Office Supplies and Expense		33,099			33,099			33,099
Outside Services		73,914			73,914			73,914
Service Company Charges		-	-	-	-	-	-	-
Water Testing		6,069		6,069				6,069
Rents		14,134			14,134			14,134
Transportation Expenses		-			-			-
Insurance - General Liability		40,103			40,103			40,103
Insurance - Health and Life		-	-		-			-
Regulatory Commission Expense - Rate Case		22,313			22,313			22,313
Miscellaneous Expense		426,100	120,569	13,397	201,775	90,360	-	426,100
Depreciation Expense, Allocated on Rebuttal Schedule G-6, Page 2								-
Taxes Other Than Income	(a)	4,764	1,348	150	2,256	1,010	-	4,764
Property Taxes, Allocated on Rebuttal Schedules G-1 & G-2				-	-			-
Income Tax, Allocated on Rebuttal Schedules G-1 & G-2								
		1,789,732	321,416	648,957	577,099	174,857	67,403	1,789,732

(a) Labor (Wages and Salaries) factor computations shown on Rebuttal Schedule G-7, Page 2a
(b) Repairs and Maintenance allocation factors computation shown on Rebuttal Schedule G-7, Page 2a

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciatio Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible										-
301.00	Organization	20,086		-							-
302.00	Franchises	1,588		-							-
303.00	Miscellaneous Intangibles	-		-							-
	Subtotal Intangible	21,674		-							-
											-
	Source of Supply										-
310.00	Land and Land Rights	11,651		-							-
311.00	Structures and Improvements	366,091	2.500%	9,152	9,152	9,152					9,152
312.00	Collecting and Impounding Res.	-	0.000%	-	-	-					-
313.00	Lakes, Rivers, Other Intakes	-	0.000%	-	-						-
314.00	Wells and Springs	1,307,051	2.520%	32,938	32,938	29,644	3,294				32,938
	Subtotal Source of Supply	1,684,793		42,090							-
											-
	Pumping										-
320.00	Land and Land Rights	44,957		-	-						-
321.00	Structures and Improvements	231,439	1.670%	3,865	3,865	3,479	387				3,865
323.00	Other Power Production	-		-	-	-	-				-
325.00	Electric Pumping Equipment	5,016,788	4.420%	221,742	221,742	199,568	22,174				221,742
326.00	Diesel Pumping Equipment	4,505	4.420%	199	199	179	20				199
328.10	Gas Engine Pumping Equipment	1,764	4.420%	78	78	70	8				78
	Subtotal Pumping	5,299,453		225,884							-
											-
	Water Treatment										-
330.00	Land and Land Rights	0		0.00%	-						-
331.00	Structures and Improvements	38,357	1.670%	641	641	577	64				641
332.00	Water Treatment Equipment	150,150	4.000%	6,006	6,006	5,405	601				6,006
	Subtotal Water Treatment	188,507		6,647							-
											-
	Transmission and Distribution										-
340.00	Land and Land Rights	-		-	-						-
341.00	Structures and Improvements	-		-	-	-	-				-
342.00	Distribution, Reservoirs, & ST	769,934	1.670%	10,423	10,423	9,381	1,042				10,423
343.00	Transmission and Distribution	11,750,888	1.530%	179,742	179,742	161,768	17,974				179,742
344.00	**Fire Mains (a)**	169	**0.000%**	-	-						-
345.00	Services	6,620,399	2.480%	164,230	164,230					164,230	164,230
346.00	Meters	1,678,135	2.510%	42,121	42,121				42,121		42,121
348.00	Hydrants	1,686,428	2.000%	33,658	33,658			33,658			33,658
349.00	Other Transmission & Distribution	-		-	-	-	-				-
	Subtotal Transmission and Distribution	22,505,953		430,174							

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2a
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciation Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	General										
389.00	Land and Land Rights	817		-							-
390.00	Structures and Improvements	560,392	1.681%	9,419	9,419	9,419					9,419
391.00	Office Funiture and Equipment	269,034	4.545%	12,228	12,228			12,228			12,228
391.10	Computer Equipment	317,767	4.545%	14,443	14,443			14,443			14,443
392.00	Transportation Equipment	358,257	25.000%	89,564	89,564	22,391		67,173			89,564
393.00	Stores Equipment	4,807	3.921%	188	188			188			188
394.00	Tools, Shop and Garage	68,778	4.135%	2,844	2,844			2,844			2,844
395.00	Laboratory Equipment	21,787	3.710%	808	808			808			808
396.00	Power Operated Equipment	20,133	5.144%	1,036	1,036	259		777			1,036
397.00	Communication Equipment	121,375	10.278%	12,474	12,474	3,119		9,356			12,474
398.00	Miscellaneous Equipment	45,907	4.979%	2,286	2,286			2,286			2,286
	Subtotal General	1,789,054		145,291				-			
								-			-
Amortization of Deferred Regulatory Assets		217,667	2.683%	5,841	5,841	5,841					5,841
				-							
	Subtotals	31,707,101		855,927							-
				-							
				-							
						-					-
						-					-
					-	-					-
Less: Amotization of Contributions		971,578	10.00%	(97,158)	(97,158)	(87,442)	(9,716)				(97,158)
Total Depreciation Expense				758,769	758,769	372,809	35,848	143,762	42,121	164,230	758,769

(a) No Explanation given in testimony why there is not depreciation on fire mains.

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
SUMMARY OF COMMODITY - DEMAND METHOD FUNCTION FACTORS

Exhibit
Rebuttal Schedule G-7
Page 1
Witness: Kozoman

Line No.	Description	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Totals
1												
2												
3	Commodity	61.219%	0.016%	2.113%	18.257%	11.191%	1.548%	5.512%	0.142%	0.000%	0.00%	100.00%
4	Demand	66.195%	0.007%	2.046%	12.050%	9.203%	1.019%	1.705%	5.229%	2.546%	0.00%	100.00%
5	Customer	93.434%	0.006%	1.155%	3.402%	1.624%	0.090%	0.096%	0.148%	0.045%	0.00%	100.00%
6	Services	90.833%	0.006%	1.281%	4.052%	2.512%	0.185%	0.287%	0.647%	0.197%	0.00%	100.00%
7	Meters	62.134%	0.004%	1.573%	9.156%	16.609%	1.235%	1.887%	5.675%	1.727%	0.00%	100.00%
8												
9												
10												
11												
12												
13												

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
COMMODITY - DEMAND METHOD FUNCTION FACTORS
Plant and Depreciation Expense Allocations

Exhibit
Rebuttal Schedule G-7
Page 2
Witness: Kozoman

Line No.	Description	Total	Demand	Commodity	Customer
1					
2					
3	Wells	1.00	0.90	0.10	
4	Pumps & Equipment	1.00	0.90	0.10	
5	Distribution Mains	1.00	0.90	0.10	
6	Customer	1.00			1.00
7	Services	1.00			1.00
8	Meters	1.00			1.00
9	Fire Hydrants	1.00			1.00
10	Transportation Equip.	1.00	0.25		0.75
11	Office Furniture	1.00			1.00
12	Communication Equip.	1.00	0.25		0.75
13					
14	**To Approximately Match ACC Staff Proposed Rates for 5/8 Inch Meter**				
15	Demand and Commodity Allocation to Wells, Pumps and Equipment and				
16	Distribution Mains would need to be changed to approximately match				
17	ACC Staff's proposed monthly minimums and commodity rates. The				
18	match would be ACC Staff's Proposed Rates to Computed Monthly				
19	Minimum and Commodity rate WITHOUT Equity returns and				
20	Income Taxes. Match would be based on cost only.				
21					
22					
23					
24	**Required Allocations:**				
25	Description	Total	Demand	Commodity	Customer
26	Wells	1.00	(0.60)	1.60	
27	Pumps & Equipment	1.00	(0.60)	1.60	
28	Distribution Mains	1.00	(0.60)	1.60	
29					
30					
31					

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 2a
Witness: Kozoman

Labor Allocation Factors	
Pumping Labor	31.44%
Meter Labor	21.21%
Customer Labor	47.35%
	100.00%

Repairs and Maintenance Allocation Factors	
Repairs and Maintenance Demand	18.04%
Repairs and Maintenance Pumping	33.23%
Repairs and Maintenance Mains	6.61%
Repairs and Maintenance Services	39.64%
Repairs and Maintenance Meters	0.21%
Repairs and Maintenance Customer	2.27%
	100.00%

Computations shown on this work sheet are from page labeled asTrial Balance in this work book. Allocation percentage were computed based on Expenses charged by Citizens Utilities and are then applied to proforma amounts.

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF CLASS ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 3
Witness: Kozoman

COMMODITY ALLOCATION FACTOR

Meter Size	(a) Total Gallons (in 1,000's) In Test Year	Percent of Total
5/8" x 3/4"	1,251,596	61.22%
3/4"	328	0.02%
1"	43,207	2.11%
1-1/2"	373,262	18.26%
2"	228,799	11.19%
3"	31,658	1.55%
4"	112,692	5.51%
6"	2,901	0.14%
8"	-	0.000%
10"	-	0.000%
Totals	2,044,442	100.00%

DEMAND ALLOCATION FACTOR

Meter Size	(a) Number of Meters and/or Services	Equiv-alent Weight	Equivalent Number of Meters and/or Services	Percent of Total
5/8" x 3/4	14,558	1.0	14,558	66.20%
3/4"	1	1.5	2	0.01%
1"	180	2.5	450	2.05%
1-1/2"	530	5.0	2,650	12.05%
2"	253	8.0	2,024	9.20%
3"	14	16.0	224	1.02%
4"	15	25.0	375	1.71%
6"	23	50.0	1,150	5.23%
8"	7	80.0	560	2.55%
10"	-	160.0	0	0.00%
Totals	15,581		21,993	100.00%

CUSTOMER ALLOCATION FACTOR

Meter Size	Number of Meters	Percent of Total
5/8" x 3/4"	14,558	93.43%
3/4"	1	0.01%
1"	180	1.16%
1-1/2"	530	3.40%
2"	253	1.62%
3"	14	0.09%
4"	15	0.10%
6"	23	0.15%
8"	7	0.04%
10"	0	0.00%
Totals	15,581	100.00%

SERVICES ALLOCATION FACTOR (b)

Meter Size	Number of Services	Install-ation Cost	Weighted Number Services	Percent of Total
5/8" x 3/4	14,558	$ 355.00	5,168,090	90.83%
3/4"	1	355.00	355	0.01%
1"	180	405.00	72,900	1.28%
1-1/2"	530	435.00	230,550	4.05%
2"	253	565.00	142,945	2.51%
3"	14	750.00	10,500	0.18%
4"	15	1,090.00	16,350	0.29%
6"	23	1,600.00	36,800	0.65%
8"	7	1,600.00	11,200	0.20%
10"	0	1,600.00	0	0.00%
Totals	15,581		5,689,690	100.00%

METER ALLOCATION FACTOR (b)

Meter Size	Number of Meters	Meter Cost	Weighted Dollars of Meters	Percent of Total
5/8" x 3/4"	14,558	$ 105.00	1,528,590	62.13%
3/4"	1	105.00	105	0.00%
1"	180	215.00	38,700	1.57%
1-1/2"	530	425.00	225,250	9.16%
2"	253	1,615.00	408,595	16.61%
3"	14	2,170.00	30,380	1.23%
4"	15	3,095.00	46,425	1.89%
6"	23	6,070.00	139,610	5.67%
8"	7	6,070.00	42,490	1.73%
10"	0	6,070.00	0	0.00%
Totals	15,581		2,460,145	100.00%

(a) Includes customer and gallon sold annualization

(b) Meter and Service Line cost from Arizona Corporation Commission Memo of April 23, 2002 from Marlin Scott, Jr.. Meter costs based on compound meters. Cost of service line and

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Including Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	2,098,583	6,889,111	1,324,636	10,312,331
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	59,180	194,273	37,355	290,808
4	Rate Bases	2,098,583	6,889,111	1,324,636	10,312,331
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	78,907	259,031	49,806	387,744
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	128,510	421,865	81,116	631,491
9					
10	Revenue Requirement for Debt Component, from Line 3	59,180	194,273	37,355	290,808
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	128,510	421,865	81,116	631,491
13	Total Return Requirement with Income Tax	187,690	616,138	118,471	922,299
14					
15	Property Tax Expense, from Schedule G-5, Page 1	35,612	33,230	13,148	81,990
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	577,099	67,403	174,857	819,359
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	143,762	164,230	42,121	350,113
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	944,163	881,000	348,597	2,173,760
19					
20	**Customer Charge**				
21	Number of Bills = 15,581 times 12	186,972			
22					
23	**Charge per Bill**	$ 5.05			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 21,993 times 12		263,910	263,910	
28					
29	**Charge per Equivalent Meter**		$ 3.34	$ 1.32	
30					
31					

32	**CUSTOMER CHARGE:**	
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge)	
34	Charge per Bill (Customer Charge with Equity Return and Income Tax)	$ 5.05
35	Charge per Equivalent Meter (For Service Line Charge with Equity Return and Income Tax)	3.34
36	Charge per Equivalent Meter (For Meter Charge with Equity Return and Income Tax)	1.32
37	(Service and Meter Revenue Requirement divided by Annual Equivalent Meters)	
38	Monthly Minimum for 5/8 x 3/4 Inch Meter	$ 9.71
39		

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Excluding Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1a
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	2,098,583	6,889,111	1,324,636	10,312,331
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	59,180	194,273	37,355	290,808
4	Rate Bases	2,098,583	6,889,111	1,324,636	10,312,331
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	0.00%	0.00%	0.00%	0.00%
6	Required Operating Income for Equity	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-
9					
10	Revenue Requirement for Debt Component, from Line 3	59,180	194,273	37,355	290,808
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	-	-	-	-
13	Total Return Requirement with Income Tax	59,180	194,273	37,355	290,808
14					
15	Property Tax Expense, from Schedule G-5, Page 1	35,612	33,230	13,148	81,990
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	577,099	67,403	174,857	819,359
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	143,762	164,230	42,121	350,113
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	815,653	459,135	267,481	1,542,270
19					
20	**Customer Charge**				
21	Number of Bills = 15,581 times 12	186,972			
22					
23	**Charge per Bill**	$ 4.36			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 21,993 times 12		263,910	263,910	
28					
29	**Charge per Equivalent Meter**		$ 1.74	$ 1.01	
30	**Actual Cost (without Debt, Equity Returns or Income Taxes)**				
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge, nor recovery of return or income tax)				
34	Charge per Bill (Customer Charge without Equity Return or Income Tax)	$ 4.36			
35	Charge per Equivalent Meter (For Service Line Charge without Equity Return or Income Tax)	1.74			
36	Charge per Equivalent Meter (For Meter Charge without Equity Return or Income Tax)	1.01			
37	(Service and Meter Revenue Requirement divided by Annualized Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter without recovery of Equity Return or Income Tax	$ 7.12			

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Including Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	1,666,178
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	46,986
5	Rate Base	1,666,178
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%
7	Required Operating Income for Equity	62,648
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	102,031
10		
11	Revenue Requirement for Debt Component, from Line 4	46,986
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	102,031
14		
15	Property Tax Expense, from Schedule G-5, Page 1	33,052
16	Demand Expenses, from Schedule G-6, Page 1	321,416
17	Depreciation, from Schedule G-6, Page 2	372,809
18	Totals	876,294
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	263,910
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 3.32
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 3.32	1.0	$ 3.32
26	3/4 Inch Meter	$ 3.32	1.5	4.98
27	1 Inch Meter	$ 3.32	2.5	8.30
28	1 1/2 Inch Meter	$ 3.32	5.0	16.60
29	2 Inch Meter	$ 3.32	8.0	26.56
30	3 Inch Meter	$ 3.32	15.0	49.81
31	4 Inch Meter	$ 3.32	25.0	83.01
32	6 Inch Meter	$ 3.32	50.0	166.02
33	8 Inch Meter	$ 3.32	80.0	265.63
34	10 Inch Meter	$ 3.32	160.0	531.27

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Excluding Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2a
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	1,666,178
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	46,986
5	Rate Base	1,666,178
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	
7	Required Operating Income for Equity	-
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	-
10		
11	Revenue Requirement for Debt Component, from Line 4	46,986
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	-
14		
15	Property Tax Expense, from Schedule G-5, Page 1	33,052
16	Demand Expenses, from Schedule G-6, Page 1	321,416
17	Depreciation, from Schedule G-6, Page 2	372,809
18	Totals	774,263
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	263,910
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 2.93
22		

23		5/8" Demand Charge	Meter Ratio	Demand Charge
24	Demand Charge Per Equivalent			
25	5/8 x 3/4 Inch Meter	$ 2.93	1.0	$ 2.93
26	3/4 Inch Meter	$ 2.93	1.5	4.40
27	1 Inch Meter	$ 2.93	2.5	7.33
28	1 1/2 Inch Meter	$ 2.93	5.0	14.67
29	2 Inch Meter	$ 2.93	8.0	23.47
30	3 Inch Meter	$ 2.93	15.0	44.01
31	4 Inch Meter	$ 2.93	25.0	73.35
32	6 Inch Meter	$ 2.93	50.0	146.69
33	8 Inch Meter	$ 2.93	80.0	234.71
34	10 Inch Meter	$ 2.93	160.0	469.41

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including and Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 3
Witness: Kozoman

Including Equity Return and Income Taxes

Line No.		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended onthly Mininum to ComputedCost
1	5/8 x 3/4 Inch Meter	$ 5.05	$ 3.34	$ 1.32	$ 3.32	$ 13.03	$ 5.60	42.98%
2	3/4 Inch Meter	5.05	5.01	1.98	4.98	17.02	5.60	32.90%
3	1 Inch Meter	5.05	8.35	3.30	8.30	25.00	14.55	58.20%
4	1 1/2 Inch Meter	5.05	16.69	6.60	16.60	44.95	31.33	69.70%
5	2 Inch Meter	5.05	26.71	10.57	26.56	68.89	45.86	66.57%
6	3 Inch Meter	5.05	50.07	19.81	49.81	124.74	78.32	62.78%
7	4 Inch Meter	5.05	83.46	33.02	83.01	204.54	115.24	56.34%
8	6 Inch Meter	5.05	166.91	66.04	166.02	404.03	157.75	39.04%
9	8 Inch Meter	5.05	267.06	158.51	265.63	696.25		
10	10 Inch Meter	5.05	801.18	528.36	531.27	1,865.86		
11								
12								
13								
14								
15								

Excluding Equity Return and Income Taxes

Line No.		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended onthly Mininum to ComputedCost
23	5/8 x 3/4 Inch Meter	$ 4.36	$ 1.74	$ 1.01	$ 2.93	$ 10.05	$ 5.60	55.72%
24	3/4 Inch Meter	4.36	2.61	1.52	4.40	12.89	5.60	43.43%
25	1 Inch Meter	4.36	4.35	2.53	7.33	18.58	14.55	78.31%
26	1 1/2 Inch Meter	4.36	8.70	5.07	14.67	32.80	31.33	95.52%
27	2 Inch Meter	4.36	13.92	8.11	23.47	49.86	45.86	91.98%
28	3 Inch Meter	4.36	26.10	15.20	44.01	89.67	78.32	87.34%
29	4 Inch Meter	4.36	43.49	25.34	73.35	146.54	115.24	78.64%
30	6 Inch Meter	4.36	86.99	50.68	146.69	288.72	157.75	54.64%
31	8 Inch Meter	4.36	139.18	81.08	234.71	459.33		
32	10 Inch Meter	4.36	278.36	162.17	469.41	914.30		

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 4
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	84,860	2,098,583	6,889,111	1,324,636	1,666,178	12,063,369
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.820%	2.820%	2.820%	2.820%	2.820%	2.820%
3	Required Operating Income - for Debt	2,393	59,180	194,273	37,355	46,986	340,187
4	Rate Bases from Schedule G-5, Page 1	84,860	2,098,583	6,889,111	1,324,636	1,666,178	12,063,369
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	3,191	78,907	259,031	49,806	62,648	453,583
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	5,197	128,510	421,865	81,116	102,031	738,718
9							
10	Revenue Requirement for Debt Component, from Line 3	2,393	59,180	194,273	37,355	46,986	340,187
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	5,197	128,510	421,865	81,116	102,031	738,718
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	7,590	187,690	616,138	118,471	149,017	1,078,905
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	27,139	35,612	33,230	13,148	33,052	142,181
16	Expenses (From Sch. G-6. Page 1)	648,957	577,099	67,403	174,857	321,416	1,789,732
17	Depreciation and Amortization (From Schedule G-6, Page 2)	35,848	143,762	164,230	42,121	372,809	758,769
18	Total Revenue Requirement by function	719,533	944,163	881,000	348,597	876,294	3,769,588
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	2,044,442	186,972	263,910	263,910	263,910	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.3519					
22	(Line 18 divided by Line 20)		$ 5.05	$ 3.34	$ 1.32	$ 3.32	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 13.03	
24							

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses and Return

Exhibit
Schedule G-8
Page 4a
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	84,860	2,098,583	6,889,111	1,324,636	1,666,178	12,063,369
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	2,393	59,180	194,273	37,355	46,986	340,187
4	Rate Bases from Schedule G-5, Page 1	84,860	2,098,583	6,889,111	1,324,636	1,666,178	12,063,369
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)						
6	Required Operating Income for Equity	-	-	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	-	-	-	-	-	-
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-	-	-
9							
10	Revenue Requirement for Debt Component, from Line 3	2,393	59,180	194,273	37,355	46,986	340,187
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	-	-	-	-	-	-
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	2,393	59,180	194,273	37,355	46,986	340,187
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	27,139	35,612	33,230	13,148	33,052	142,181
16	Expenses (From Sch. G-6. Page 1)	648,957	577,099	67,403	174,857	321,416	1,789,732
17	Depreciation and Amortization (From Schedule G-6, Page 2)	35,848	143,762	164,230	42,121	372,809	758,769
18	Total Revenue Requirement by function	714,337	815,653	459,135	267,481	774,263	3,030,869
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	2,044,442	186,972	263,910	263,910	263,910	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.3494					
22	(Line 18 divided by Line 20)		$ 4.3624	$ 1.7397	$ 1.0135	$ 2.9338	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 10.05	

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **without** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 1
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4a	$ 0.3494
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	$ 2.93
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	4.36
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	1.74
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	1.01
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4a	$ 10.05

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 5.60
Proposed Commodity Rate			
0	to	4,000	$ 0.84
4,001	to	100,000	$ 1.24
Over 100,001			$ 1.52

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col. 8-4)
	Computed Costs, without Equity Return or Income Taxes									Recovery of Expenses or, (Lack of Recovery)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	
	-	$ 10.05	-	$ 10.05		-	$ 5.60		$ 5.60	$ (4.45)
	1,000	$ 10.05	$ 0.3494	$ 10.40		1,000	5.60	$ 0.84	6.44	(3.96)
	2,000	10.05	0.70	10.75		2,000	5.60	1.68	7.28	(3.47)
	3,000	10.05	1.05	11.10		3,000	5.60	2.52	8.12	(2.98)
	4,000	10.05	1.40	11.45		4,000	5.60	3.36	8.96	(2.49)
	5,000	10.05	1.75	11.80		5,000	5.60	4.60	10.20	(1.60)
	6,000	10.05	2.10	12.15	**Usage**	6,000	5.60	5.84	11.44	(0.71)
	6,795	10.05	2.37	12.42	**<-Level->**	**6,795**	5.60	6.83	12.43	0.00
	7,000	10.05	2.45	12.50	**When**	7,000	5.60	7.08	12.68	0.18
	8,000	10.05	2.80	12.84	**Revenues**	8,000	5.60	8.32	13.92	1.08
	9,000	10.05	3.14	13.19	**Equal**	9,000	5.60	9.56	15.16	1.97
	10,000	10.05	3.49	13.54	**Expenses**	10,000	5.60	10.80	16.40	2.86
	11,000	10.05	3.84	13.89	**(No Rate**	11,000	5.60	12.04	17.64	3.75
	12,000	10.05	4.19	14.24	**of Return**	12,000	5.60	13.28	18.88	4.64
	13,000	10.05	4.54	14.59	**on**	13,000	5.60	14.52	20.12	5.53
	14,000	10.05	4.89	14.94	**Equity**	14,000	5.60	15.76	21.36	6.42
	15,000	10.05	5.24	15.29	**or Income**	15,000	5.60	17.00	22.60	7.31
	16,000	10.05	5.59	15.64	**Taxes**	16,000	5.60	18.24	23.84	8.20
	17,000	10.05	5.94	15.99	**Included)**	17,000	5.60	19.48	25.08	9.09
	18,000	10.05	6.29	16.34		18,000	5.60	20.72	26.32	9.98
	19,000	10.05	6.64	16.69		19,000	5.60	21.96	27.56	10.87
	20,000	10.05	6.99	17.04		20,000	5.60	23.20	28.80	11.76
	21,000	10.05	7.34	17.39		21,000	5.60	24.44	30.04	12.65
	22,000	10.05	7.69	17.74		22,000	5.60	25.68	31.28	13.54
	23,000	10.05	8.04	18.09		23,000	5.60	26.92	32.52	14.43
	24,000	10.05	8.39	18.44		24,000	5.60	28.16	33.76	15.32
	25,000	10.05	8.74	18.78		25,000	5.60	29.40	35.00	16.22
	26,000	10.05	9.08	19.13		26,000	5.60	30.64	36.24	17.11
	27,000	10.05	9.43	19.48		27,000	5.60	31.88	37.48	18.00
	28,000	10.05	9.78	19.83		28,000	5.60	33.12	38.72	18.89
	29,000	10.05	10.13	20.18		29,000	5.60	34.36	39.96	19.78
	30,000	10.05	10.48	20.53		30,000	5.60	35.60	41.20	20.67
	Average Usage					**Average Usage**				
	7,171	10.05	2.51	12.56		7,171	5.60	7.29	12.89	**0.34**

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **with** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 2
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4	$ 0.3519
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	$ 3.32
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	5.05
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	1.32
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	3.34
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4	$ 13.03

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 5.60
Proposed Commodity Rate			
0	to	4,000	$ 0.84
4,001	to	100,000	$ 1.24
Over 100,001			$ 1.52

Computed Costs, with Equity Return and Income Taxes

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col. 8-4) Recovery of Expenses Rate of Return Income Tax or (Lack of Recovery)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	
24	-	$ 13.03	-	$ 13.03		-	$ 5.60		$ 5.60	$ (7.43)
25	1,000	$ 13.03	$ 0.3519	$ 13.38		1,000	5.60	$ 0.84	6.44	(6.94)
26	2,000	13.03	0.70	13.73		2,000	5.60	1.68	7.28	(6.45)
27	3,000	13.03	1.06	14.09		3,000	5.60	2.52	8.12	(5.97)
28	4,000	13.03	1.41	14.44		4,000	5.60	3.36	8.96	(5.48)
29	5,000	13.03	1.76	14.79		5,000	5.60	4.60	10.20	(4.59)
30	6,000	13.03	2.11	15.14		6,000	5.60	5.84	11.44	(3.70)
31	7,000	13.03	2.46	15.49		7,000	5.60	7.08	12.68	(2.81)
32	8,000	13.03	2.82	15.84		8,000	5.60	8.32	13.92	(1.92)
33	9,000	13.03	3.17	16.20		9,000	5.60	9.56	15.16	(1.04)
34	10,000	13.03	3.52	16.55	**Usage**	10,000	5.60	10.80	16.40	(0.15)
35	**10,170**	13.03	3.58	16.61	**<-Level->**	**10,170**	5.60	11.01	16.61	0.00
36	11,000	13.03	3.87	16.90	**When**	11,000	5.60	12.04	17.64	0.74
37	12,000	13.03	4.22	17.25	**Revenues**	12,000	5.60	13.28	18.88	1.63
38	13,000	13.03	4.58	17.60	**Equal**	13,000	5.60	14.52	20.12	2.52
39	14,000	13.03	4.93	17.96	**Expenses**	14,000	5.60	15.76	21.36	3.40
40	15,000	13.03	5.28	18.31	**and**	15,000	5.60	17.00	22.60	4.29
41	16,000	13.03	5.63	18.66	**Return**	16,000	5.60	18.24	23.84	5.18
42	17,000	13.03	5.98	19.01	**on Equity**	17,000	5.60	19.48	25.08	6.07
43	18,000	13.03	6.34	19.36	**and**	18,000	5.60	20.72	26.32	6.96
44	19,000	13.03	6.69	19.72	**Income**	19,000	5.60	21.96	27.56	7.84
45	20,000	13.03	7.04	20.07	**Taxes**	20,000	5.60	23.20	28.80	8.73
46	21,000	13.03	7.39	20.42		21,000	5.60	24.44	30.04	9.62
47	22,000	13.03	7.74	20.77		22,000	5.60	25.68	31.28	10.51
48	23,000	13.03	8.09	21.12		23,000	5.60	26.92	32.52	11.40
49	24,000	13.03	8.45	21.48		24,000	5.60	28.16	33.76	12.28
50	25,000	13.03	8.80	21.83		25,000	5.60	29.40	35.00	13.17
51	26,000	13.03	9.15	22.18		26,000	5.60	30.64	36.24	14.06
52	27,000	13.03	9.50	22.53		27,000	5.60	31.88	37.48	14.95
53	28,000	13.03	9.85	22.88		28,000	5.60	33.12	38.72	15.84
54	**Average Usage**					**Average Usage**				
55	7,171	$ 13.03	$ 2.524	$ 15.55		7,171	$ 5.60	7.29	12.89	**(2.66)**

Arizona American - Sun City West Water
Summary of Revenues by Customer Classification - Present and Proposed Rates
With Annualized Revenues to Year End Number of Customers
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Meter Size	Customer Classification	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8 Inch	Residential	$ 2,075,364	$ 2,832,860	$ 757,496	36.50%	61.76%	61.93%
2	3/4 Inch	Residential	409	559	150	36.57%	0.01%	0.01%
3	1 Inch	Residential	40,107	54,773	14,666	36.57%	1.19%	1.20%
4	1.5 Inch	Residential	511,059	698,068	187,009	36.59%	15.21%	15.26%
5	2 Inch	Residential	162,940	222,568	59,628	36.59%	4.85%	4.87%
6	3 Inch	Residential	-	-	-		0.00%	0.00%
7	4 Inch	Residential	117,032	159,874	42,842	36.61%	3.48%	3.50%
8	5/8 Inch	Commercial	9,572	13,066	3,494	36.50%	0.28%	0.29%
9	3/4 Inch	Commercial	-	-	-		0.00%	0.00%
10	1 Inch	Commercial	34,155	46,648	12,494	36.58%	1.02%	1.02%
11	1.5 Inch	Commercial	74,345	101,550	27,205	36.59%	2.21%	2.22%
12	2 Inch	Commercial	208,910	285,370	76,459	36.60%	6.22%	6.24%
13	3 Inch	Commercial	51,125	69,836	18,710	36.60%	1.52%	1.53%
14	4 Inch	Commercial	11,618	15,871	4,253	36.60%	0.35%	0.35%
15	6 Inch	Commercial	4,923	6,724	1,802	36.60%	0.15%	0.15%
16	4 Inch	Fire Protection	4,140	5,654	1,514	36.57%	0.12%	0.12%
17	6 Inch	Fire Protection	11,745	16,041	4,296	36.58%	0.35%	0.35%
18	8 Inch	Fire Protection	5,040	6,883	1,843	36.57%	0.15%	0.15%
19	Miscellaneous Revenues		37,640	37,640	-	0.00%	1.12%	0.82%
20	Subtotal Water Revenues		$ 3,360,124	$ 4,573,984	$ 1,213,860	36.13%	100.00%	100.00%
21								
22				**Revenue Annualization (a)**				
23			**Present**	**Proposed**	**Dollar**	**Percent**	Bills to be	Additional Gallons to be Pumped
24			**Revenues**	**Revenues**	**Change**	**Change**	Issued	(In 1,000's)
25	5/8 Inch	Residential	$ 3,500	4,777	$ 1,277	36.49%	291	2,217
26	3/4 Inch	Residential	-	-	-			
27	1.5 Inch	Residential	278	380	102	36.59%	3	220
28	2 Inch	Residential	(901)	(1,231)	(330)	36.59%	(9)	(487)
29	3 Inch	Residential			-			
30	4 Inch	Residential	-	-	-			
31	5/8 Inch	Commercial	(246)	(336)	(90)	36.48%	(24)	(136)
32	3/4 Inch	Commercial			-			
33	1 Inch	Commercial	(440)	(601)	(161)	36.58%	(10)	(290)
34	1.5 Inch	Commercial	1,014	1,385	371	36.59%	12	622
35	2 Inch	Commercial	5,600	7,649	2,049	36.60%	40	3,590
36	3 Inch	Commercial	(4,055)	(5,539)	(1,484)	36.60%	(17)	(2,581)
37	4 Inch	Commercial	-	-	-			
38	6 Inch	Commercial	-	-	-			
39	4 Inch	Fire Protection	540	737	197	36.57%	18	
40	6 Inch	Fire Protection	135	184	49	36.58%	3	
41	8 Inch	Fire Protection	-	-	-			
42	Total Revenue Annualization		$ 5,424	$ 7,406	$ 1,982	36.53%	307	3,153
43	Total Revenues		$ 3,365,549	4,581,390	1,215,842	36.13%		

44 **(a)** Customer Growth Annualization is calculated by computing the change in the number of customers by month from
45 the beginning of the year to the end of the year, and then multipling the additional customers times the average
46 revenue for that month.

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Analysis of Revenue by Detailed Class at Average Usage

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.		Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	14,463	7,171	$ 11.67	$ 15.93	4.26	36.49%
2	3/4 Inch	Residential	1	27,333	34.09	46.56	12.47	36.57%
3	1 Inch	Residential	115	15,429	28.76	39.28	10.52	36.56%
4	1.5 Inch	Residential	460	59,042	92.61	126.49	33.89	36.59%
5	2 Inch	Residential	134	55,342	101.46	138.59	37.13	36.59%
6	3 Inch	Residential	-	-	-	-	-	0.00%
7	4 Inch	Residential	1	8,617,167	9,752.71	13,322.86	3,570.15	36.61%
8	5/8 Inch	Commercial	73	5,736	10.33	14.11	3.77	36.48%
9	3/4 Inch	Commercial	-	-	-	-	-	0.00%
10	1 Inch	Commercial	66	28,108	42.96	58.67	15.71	36.58%
11	1.5 Inch	Commercial	69	56,383	89.63	122.43	32.80	36.59%
12	2 Inch	Commercial	117	97,766	148.98	203.50	54.52	36.60%
13	3 Inch	Commercial	15	185,076	275.76	376.69	100.92	36.60%
14	4 Inch	Commercial	1	773,833	968.17	1,322.56	354.38	36.60%
15	6 Inch	Commercial	1	241,750	410.24	560.37	150.13	36.60%
16		Construction						
17	4 Inch	Fire Protection	12	-	8.00	11.94	3.94	49.25%
18	6 Inch	Fire Protection	22	-	30.00	44.78	14.78	49.27%
19	8 Inch	Fire Protection	7	-	45.00	67.18	22.18	49.29%
20	10 Inch	Fire Protection			120.00	179.14	59.14	49.28%
21		Totals	15,555					
22								
23		Actuall Year End Number						
24		of Customers:	15,581					
25								
26		**(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.						
27								

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Changes in Representative Rate Schedules

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1	Percentage Increase in Monthly Minimums				
2	Percentage Increase in Commodity Rates				
3					
4	**Monthly Usage Charge for:**				
5	Residential,Commercial, Irrigation, Resale and Miscellaneous Customers				
6	5/8 x 3/4 Inch	Rounded Down $0.01	$ 5.00	$ 6.82	36.40%
7	3/4 Inch	Rounded Down $0.01	5.00	6.82	36.40%
8	1 Inch		13.00	17.75	36.54%
9	1 1/2 Inch		28.00	38.24	36.57%
10	2 Inch		41.00	56.00	36.59%
11	3 Inch		70.00	95.60	36.57%
12	4 Inch		103.00	140.67	36.57%
13	6 Inch		141.00	192.57	36.57%
14					
15	Construction / Tariff to be canceled, as it is no longer used		8.00		
16	General Fire Sprinkler Rate 4 "		30.00	40.97	36.57%
17	General Fire Sprinkler Rate 6 "		45.00	61.46	36.58%
18	General Fire Sprinkler Rate 8 "		60.00	81.94	36.57%
19	General Fire Sprinkler Rate 10 "		120.00	163.89	36.58%
20					
21					
22					
23					
24					
25	Gallons In Minimum				
26	All		-	-	
27					
28					
29					
30					
31	**Tier 1:** Gallons upper limit				
32	All, except construction		8,000	8,000	
33	Construction / Tariff to be canceled, as it is no longer used		999,999,999	999,999,999	
34					
35	(a) Rounded to nearest whole cent				

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Changes in Representative Rate Schedules

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1					
2					
3	**Tier 2:** (Gallon upper limit, up to, but not exceeding)				
4	All, except construction		999,999,999	999,999,999	
5	Construction / Tariff to be canceled, as it is no longer used		999,999,999	999,999,999	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15	**Tier 3:** (Gallon over)				
16	All, except construction		999,999,999	999,999,999	
17	Construction / Tariff to be canceled, as it is no longer used		999,999,999	999,999,999	
18					
19					
20					
21					
22					
23					
24					
25					
26					
27	Commodity Rates (per 1,000 gallons over minimum and per Tier)				
28	All, except construction (a)	Tier 1 (a)	$ 0.93	$ 1.27	36.56%
29	All, except construction (a)	Tier 2 (a)	1.12	1.53	36.61%
30	All, except construction (a)	Tier 3 (a)	1.12	1.53	36.61%
31	All, except construction (a)	Tier 4 (a)			
32					
33					
34	Construction / Tariff to be canceled, as it is no longer used		0.60		
35					
36	Effluent Sales, per Acre Foot		150.00	$ 204.86	36.57%
37					
38	Central Arizona Project - Raw Untreated Water - Per 1,000 Gallons		0.50	$ 0.68	36.00%
39					
40	In Addition to above charges, Company shall collect Groundwater Saving Fee Per Commission Decision				
41	62293				
42	(a) Rounded to nearest whole cent				

Arizona American - Sun City West Water
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates
1	Establishment	$ 30.00	$ 30.00
2	Establishment (After Hours)	$ 40.00	$ 40.00
3	Reconnection (Deliquent)		$ -
4	Reconnection (After Hours)		$ -
5	Meter Test	$ 10.00	$ 10.00
6	Deposit	**	**
7	Deposit Interest	**	**
8	Re-Establishment (With-in 12 Months)	***	***
9			
10	NSF Check	$ 10.00	$ 10.00
11	Deferred Payment, Per Month (b)		
12	Meter Re-Read	$ 5.00	$ 5.00
13	Charge of Moving Customer Meter -		
14	Customer Requested	Cost	Cost
15	Late Payment Charge	1.50%	1.50%
16	Damages to Meter Locks, Valves, Seals	Cost	Cost
17	Sprinklers	See Schedule H-3, Page 1	
18			
19			
20	** PER COMMISSION RULES (R14-2-403.B)		
21	*** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)		
22	IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM		
23	ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE		
24	TAX. PER COMMISSION RULE (14-2-409.D 5)		
25	ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,		
26	AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.		
27			
28			
29			

	Meter Size	Present Charges	Proposed Charges
32	5/8 x 3/4 Inch	$320	$500
33	3 / 4 Inch	$360	$575
34	1 Inch	$415	$660
35	1 1/2 Inch	$725	$900
36	2 Inch	$1,090	$2,220
37	3 Inch	Cost	Cost
38	4 Inch	Cost	Cost
39	6 Inch	Cost	Cost
40	8 Inch	Cost	Cost

As meters and service lines are now taxable income for income purposes, The Company shall collect income taxes on the meter and service line charges. Any tax collected will be refunded each year that the meter deposit is refunded.

Groundwater Withdrawal Fees shall be collected as an assessment, and is subject to annual revisions as required due to changes in rates charged by the Arizona Department of Water Resources ("ADWR"). Includes an allowance of 10% lost and unaccounted for water.

SUN CITY WEST
SEWER DIVISION

Arizona American - Sun City West Sewer
Summary of Revenues by Customer Classification - Present and Proposed Rates
Test Year ended December 31, 2001

Exhibit
Rebuttal Schedule 1
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Sewer Revenues	Percent of Proposed Sewer Revenues
1	Residential Units (WSR)	$ 2,789,886	$ 4,061,139	$ 1,271,253	45.57%	79.25%	79.25%
2	Commercial Units (SSC)	76,035	110,711	34,675	45.60%	2.16%	2.16%
3	Commercial Large User (WS6)	12,683	18,499	5,816	45.86%	0.36%	0.36%
4	Muti-family Residential Units (AC WSRE)	553,264	805,368	252,103	45.57%	15.72%	15.72%
5							
6							
7	Commercial additional toilets (WS1)	70,575	102,800	32,225	45.66%	2.00%	2.01%
8	Commercial per dishwasher (WS2)	11,241	16,368	5,127	45.61%	0.32%	0.32%
9	Commercial per wash machine (WS3)	3,247	4,728	1,481	45.62%	0.09%	0.09%
10	Commercial per wash rack (WS4)	2,497	3,636	1,139	45.60%	0.07%	0.07%
11	Miscellaneous Revenues	1,002	1,002	-	0.00%	0.03%	0.02%
12	**Subtotal of Revenues**	$ 3,520,431	$ 5,124,250	$ 1,603,820	45.56%	100.00%	100.00%
13							

Line No.	Revenue Annualization	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Bills to be Issued
14						
15	**Revenue Annualization**					
16	Residential Units (WSR)	3,134	4,563	1,428	45.57%	193
17	Commercial Units (SSC)	7,089	10,321	3,233	45.60%	307
18	Commercial Large User (WS6)	681	992	311	45.62%	15
19	Muti-family Residential Units (AC WSRE)					
20	Commercial additional toilets (WS1)	(424)	(618)	(194)	45.66%	(80)
21	Commercial per dishwasher (WS2)			-		
22	Commercial per wash machine (WS3)	566	824	258	45.62%	57
23	Commercial per wash rack (WS4)					
24	**Total Revenue Annualization**	$ 11,046	$ 16,083	5,036	45.59%	492
25						
26	Total Revenues	$ 3,531,477	$ 5,140,333	1,608,856	45.56%	

Arizona American - Sun City West Sewer
Analysis of Revenue by Detailed Class at Average Usage
Test Year ended December 31, 2001

Exhibit
Rebuttal Schedule 2
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	Residential Units (WSR)	14,316	N/A	16.24	23.64	7.40	45.57%
2	Commercial Units (SSC)	274	N/A	23.09	33.62	10.53	45.60%
3	Commercial Large User (WS6)	5	187,702	209.77	305.95	96.19	45.85%
4	Muti-family Residential Units (AC WSRE)	2,839	N/A	-	-	-	0.00%
5	Total Actual Year End Customers	17,434					
6							
7	Commercial additional toilets (WS1)	1,110	N/A	5.30	7.72	2.42	45.66%
8	Commercial per dishwasher (WS2)	22	N/A	42.58	62.00	19.42	45.61%
9	Commercial per wash machine (WS3)	27	N/A	9.93	14.46	4.53	45.62%
10	Commercial per wash rack (WS4)	10	N/A	20.81	30.30	9.49	45.60%
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21	Total Other Units	1,169					

Arizona American - Sun City West Sewer
Changes in Representative Rate Schedules
Test Year ended December 31, 2001

Exhibit
Rebuttal Schedule 3
Page 1
Witness: Kozoman

Line No.	Customer Classification and.or Meter Size, If Applicable	Present Rates	Proposed Rates	Percent Change
1	**Monthly Usage Charge for:**			
2	Residential and Commercial			
3	Residential (WSR) Rounded Down	$ 16.24	$ 23.64	45.57%
4	Commercial (SSC)	23.09	33.62	45.60%
5	Commercial Large User (SS6 based on consumption)	45.42	66.14	45.62%
6	WS1 (commercial, additonal toilets)	5.30	7.72	45.66%
7	WS2 (commercial restaurant, per dishwasher or garbage grinder)	42.58	62.00	45.61%
8	WS3 (commercial laundromat, per washing machine)	9.93	14.46	45.62%
9	WS4 (commercial, per wash rack)	20.81	30.30	45.60%
10				
11				
12	**Annual Fee for Industrial Discharge Service**			
13	For those customers consuming an amount of water less than or equal			
14	50,000 gallons per month through one or more water meters to the			
15	same facility, inclusive of meters used for irrigation:	$ 500.00	$ 500.00	
16				
17				
18	For those customers consuming an amount of water greater than			
19	50,000 gallons per month through one or more water meters to the			
20	same facility, inclusive of meters used for irrigation:	$ 1,000.00	$ 1,000.00	
21				
22	Annual Fee for Industrial Discharge Service charges shall be non-refundable and shall be assessed			
23	in advance each January by the Company by special billing. For new customers receiving this service,			
24	a prorated charge shall be assessed.			
25				
26				
27				
28				
29				
30				
31				
32	Gallons In Minimum			
33	Commercial SSR6	20,000	20,000	
34				
35	Commodity Rates (per 1,000 gallons over minimum)			
36	Commercial SSR6	$ 0.98	$ 1.43	45.92%
37				
38	(a) Rounded to nearest whole cent			

Arizona American - Sun City West Sewer
Changes in Representative Rate Schedules
Test Year ended December 31, 2001

Exhibit
Rebuttal Schedule 3
Page 2
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates
1	Establishment		
2	Establishment (After Hours)		
3	Reconnection (Deliquent)		
4	Reconnection (After Hours)		
5			
6	Deposit		
7	Deposit Interest		
8	Re-Establishment (With-in 12 Months)		
9			
10	NSF Check		
11	Deferred Payment, Per Month (b)		
12			
13			
14			
15	Late Payment Charge	1.50%	1.50%
16			
17	Rates for above charges are listed on Schedule H-3, Page 3, for Sun City West Water.		
18			
19			
20	** PER COMMISSION RULES (R14-2-403.B)		
21	*** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)		
22	IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM		
23	ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE		
24	TAX. PER COMMISSION RULE (14-2-409.D 5)		
25	ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,		
26	AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.		

Arizona American - Sun City West Sewer
Summary of Revenues by Customer Classification - Present and Proposed Rates
Test Year ended December 31, 2001
Step-One Rate Increase

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Sewer Revenues	Percent of Proposed Sewer Revenues
1	Residential Units (WSR)	2,789,886	3,906,527	$ 1,116,642	40.02%	79.25%	79.26%
2	Commercial Units (SSC)	76,035	106,463	30,427	40.02%	2.16%	2.16%
3	Commercial Large User (WS6)	12,683	17,736	5,053	39.84%	0.36%	0.36%
4	Muti-family Residential Units (AC WSRE)	553,264	774,706	221,442	40.02%	15.72%	15.72%
5							
6							
7	Commercial additional toilets (WS1)	70,575	98,805	28,230	40.00%	2.00%	2.00%
8	Commercial per dishwasher (WS2)	11,241	15,737	4,496	40.00%	0.32%	0.32%
9	Commercial per wash machine (WS3)	3,247	4,545	1,298	39.98%	0.09%	0.09%
10	Commercial per wash rack (WS4)	2,497	3,496	998	39.98%	0.07%	0.07%
11	Miscellaneous Revenues	1,002	1,002	-	0.00%	0.03%	0.02%
12	**Subtotal of Revenues**	$ 3,520,431	$ 4,929,017	$ 1,408,586	40.01%	100.00%	100.00%
13							

Line No.	Revenue Annualization	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Bills to be Issued
14						
15	**Revenue Annualization**					
16	Residential Units (WSR)	3,134	4,389	1,255	40.02%	193
17	Commercial Units (SSC)	7,089	9,925	2,837	40.02%	307
18	Commercial Large User (WS6)	681	954	273	40.00%	15
19	Muti-family Residential Units (AC WSRE)					
20	Commercial additional toilets (WS1)	(424)	(594)	(170)	40.00%	(80)
21	Commercial per dishwasher (WS2)			-		
22	Commercial per wash machine (WS3)	566	792	226	39.98%	57
23	Commercial per wash rack (WS4)					
24	**Total Revenue Annualization**	$ 11,046	$ 15,467	4,420	40.02%	492
25						
26	Total Revenues	$ 3,531,477	$ 4,944,483	1,413,006	40.01%	

Arizona American - Sun City West Sewer
Analysis of Revenue by Detailed Class at Average Usage
Test Year ended December 31, 2001
Step-One Rate Increase

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.	Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	Residential Units (WSR)	14,316	N/A	16.24	22.74	6.50	40.02%
2	Commercial Units (SSC)	274	N/A	23.09	32.33	9.24	40.02%
3	Commercial Large User (WS6)	5	187,702	209.77	293.34	83.57	39.84%
4	Muti-family Residential Units (AC WSRE)	2,839	N/A	-	-	-	0.00%
5	Total Actual Year End Customers	17,434					
6							
7	Commercial additional toilets (WS1)	1,110	N/A	5.30	7.42	2.12	40.00%
8	Commercial per dishwasher (WS2)	22	N/A	42.58	59.61	17.03	40.00%
9	Commercial per wash machine (WS3)	27	N/A	9.93	13.90	3.97	39.98%
10	Commercial per wash rack (WS4)	10	N/A	20.81	29.13	8.32	39.98%
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21	Total Other Units	1,169					

Arizona American - Sun City West Sewer
Changes in Representative Rate Schedules
Test Year ended December 31, 2001
Step-One Rate Increase

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and.or Meter Size, If Applicable	Present Rates	Proposed Rates	Percent Change
1	**Monthly Usage Charge for:**			
2	Residential and Commercial			
3	Residential (WSR) (a)	$ 16.24	$ 22.74	40.02%
4	Commercial (WSC) (a)	23.09	32.33	40.02%
5	Commercial Large User (SS6 based on consumption) (a)	45.42	63.59	40.00%
6	WS1 (commercial, additonal toilets)	5.30	7.42	40.00%
7	WS2 (commercial restaurant, per dishwasher or garbage grinder) (a)	42.58	59.61	40.00%
8	WS3 (commercial laundromat, per washing machine) (a)	9.93	13.90	39.98%
9	WS4 (commercial, per wash rack) (a)	20.81	29.13	39.98%
10				
11				
12	**Annual Fee for Industrial Discharge Service**			
13	For those customers consuming an amount of water less than or equal			
14	50,000 gallons per month through one or more water meters to the			
15	same facility, inclusive of meters used for irrigation:	$ 500.00		
16				
17				
18	For those customers consuming an amount of water greater than			
19	50,000 gallons per month through one or more water meters to the			
20	same facility, inclusive of meters used for irrigation:	$ 1,000.00		
21				
22	Annual Fee for Industrial Discharge Service charges shall be non-refundable and shall be assessed			
23	in advance each January by the Company by special billing. For new customers receiving this service,			
24	a prorated charge shall be assessed.			
25				
26				
27				
28				
29				
30				
31				
32	Gallons In Minimum			
33	Commercial SSR6	20,000	20,000	
34				
35	Commodity Rates (per 1,000 gallons over minimum)			
36	Commercial SSR6 (a)	$ 0.98	$ 1.3700	39.80%

Arizona American - Sun City West Sewer
Changes in Representative Rate Schedules
Test Year ended December 31, 2001
Step-One Rate Increase

Exhibit
Schedule H-3
Page 2
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates
1	Establishment		
2	Establishment (After Hours)		
3	Reconnection (Deliquent)		
4	Reconnection (After Hours)		
5			
6	Deposit		
7	Deposit Interest		
8	Re-Establishment (With-in 12 Months)		
9			
10	NSF Check		
11	Deferred Payment, Per Month (b)		
12			
13			
14			
15	Late Payment Charge	1.50%	1.50%
16			
17			
18			
19			
20	** PER COMMISSION RULES (R14-2-403.B)		
21	*** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)		
22	IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM		
23	ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE		
24	TAX. PER COMMISSION RULE (14-2-409.D 5)		
25	ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,		
26	AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.		
27			
28			
29			
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40			
41			
42			

TUBAC
WATER DIVISION

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Present Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-1
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and Revenue Annualizations	251,121	213,560		18,662	4,603	11,433	2,863				
Misc. Revenue **(a)**	2,691	2,691									
Total Revenues	253,812	216,251	-	18,662	4,603	11,433	2,863	-	-	-	-
Operating Expenses **(b)**	185,658	155,749	-	16,287	2,970	5,667	4,985	-	-	-	-
Depreciation and Amortization **(b)**	35,474	28,687	-	3,556	676	1,203	1,352	-	-	-	-
Property Tax **(c)**	20,655	17,598	-	1,519	375	930	233	-	-	-	-
Income Tax **(d)**	(7,404)	(4,224)	-	(2,232)	(20)	932	(1,860)	-	-	-	-
Total Operating Expenses	234,383	197,810	-	19,130	4,001	8,732	4,710	-	-	-	-
Operating Income	19,430	18,441	-	(468)	603	2,700	(1,846)	-	-	-	-
Interest Expense **(e)**	31,882	25,546	-	3,286	636	1,132	1,283	-	-	-	-
Net Income	(12,453)	(7,105)	-	(3,754)	(33)	1,568	(3,129)	-	-	-	-
Rate Base **(f)**	1,130,170	905,553	-	116,486	22,532	40,130	45,469	-	-	-	-
Rate of Return **(g)**	1.72%	2.04%		-0.40%	2.67%	6.73%	-4.06%				

(a) Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	(19,857)										
Percent of Taxable Income		57.05%	0.00%	30.15%	0.26%	-12.59%	25.13%	0.00%	0.00%	0.00%	0.00%
Income Tax		(7,404)	(7,404)	(7,404)	(7,404)	(7,404)	(7,404)	(7,404)	(7,404)	(7,404)	(7,404)
Allocated Income Tax		(4,224)	-	(2,232)	(20)	932	(1,860)	-	-	-	-
Income Tax											
Property Tax Allocation	20,655	85.20%	0.00%	7.35%	1.81%	4.50%	1.13%	0.00%	0.00%	0.00%	0.00%
Property Tax Allocation	20,655	17,598	-	1,518.69	374.62	930.37	233.01	-	-	-	-

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Rates of Return at Proposed Rates Using ACC Staff Net Plant and Expenses

Exhibit
Rebuttal Schedule G-2
Page 1
Witness: Kozoman

Meter Size->	Totals	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Water Revenues and Revenue Annualizations **(1)**	340,112	288,555	-	25,681	5,796	16,638	3,441	-	-		
	-										
Misc. Revenue **(a)**	2,691	2,691									
Total Revenues	342,803	291,246	-	25,681	5,796	16,638	3,441	-	-	-	-
Operating Expenses **(b)**	185,658	155,749	-	16,287	2,970	5,667	4,985	-	-	-	-
Depreciation and Amortization **(b)**	35,474	28,687	-	3,556	676	1,203	1,352	-	-	-	-
Property Tax **(c)**	20,655	17,548	-	1,547	349	1,003	207	-	-	-	-
Income Tax **(d)**	26,724	24,629	-	388	451	2,951	(1,696)	-	-	-	-
Total Operating Expenses	268,510	226,614	-	21,779	4,446	10,823	4,849	-	-	-	-
Operating Income	74,292	64,633	-	3,902	1,351	5,815	(1,408)	-	-	-	-
Interest Expense **(e)**	31,882	25,546	-	3,286	636	1,132	1,283	-	-	-	-
Net Income	42,410	39,087	-	616	715	4,683	(2,691)	-	-	-	-
Rate Base **(f)**	1,130,170	905,553	-	116,486	22,532	40,130	45,469	-	-	-	-
Rate of Return **(g)**	6.57%	7.14%		3.35%	5.99%	14.49%	-3.10%				
Percent of Total Customers		92.510%	0.000%	5.870%	0.607%	0.607%	0.405%	0.000%	0.000%	0.000%	0.000%

(1) Revenues are from ACC Staff Proposed Rates Bill Count.
(a) Miscellaneous Revenue allocated to 5/8 Inch Customer Class.
(b) Operating Expenses and Depreciation computations are shown on Rebuttal Schedule G-4, Page 1.
(c) Property Taxes allocated based on Revenues
(d) Income Taxes allocated based on taxable income
(e) Interest Expense allocated based on Rate Base, Please see Rebuttal Schedule G-3, Page 1
(f) Rate Base computations are shown on Rebuttal Schedule G-3, Page 1
(g) Operating Income Divided by Rate Base

Income Tax Allocation											
Net Income & Income Tax	69,134										
Percent of Taxable Income		92%	0%	1%	2%	11%	-6%	0%	0%	0%	0%
Income Tax		26,724	26,724	26,724	26,724	26,724	26,724	26,724	26,724	26,724	26,724
Allocated Income Tax		24,629	-	388	451	2,951	(1,696)	-	-	-	-
Percent of Revenues		84.96%	0.00%	7.49%	1.69%	4.85%	1.00%	0.00%	0.00%	0.00%	0.00%
Property Tax Allocation	20,655	17,548	-	1,547	349	1,003	207	-	-	-	-

Arizona American - Tubac Water
Test Year Ended December 31, 2000
Cost of Service Study Using Commodity / Demand Method
Allocation of Assets to Customer Classes Using ACC Staff Net Plant

Exhibit
Rebuttal Schedule G-3
Page 1
Witness: Kozoman

Line No.		Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
1	Plant, Minus Accumulated Depreciation, Advances and Contributions in Aid and Meter Deposits (from Schedule G-5, Page 1)											
2	Commodity	73,292	62,697	-	5,316	1,196	3,795	288	-	-	-	-
3	Demand	727,570	553,704	-	87,842	18,174	29,079	38,771	-	-	-	-
4	Customer	49,724	46,000	-	2,919	302	302	201	-	-	-	-
5	Service	213,848	194,384	-	14,072	1,564	2,031	1,797	-	-	-	-
6	Meter	65,736	48,768	-	6,337	1,296	4,924	4,411	-	-	-	-
7	Totals	1,130,170	905,553	-	116,486	22,532	40,130	45,469	-	-	-	-
8												
9												
10	Commodity	-	-	-	-	-	-	-	-	-	-	-
11	Demand	-	-	-	-	-	-	-	-	-	-	-
12	Customer											
13	Service											
14	Meter											
15	Totals	-	-	-	-	-	-	-	-	-	-	-
16												
17												
18				-	-	-	-	-	-	-		
19				-	-	-	-	-	-	-	-	-
20				-	-	-	-	-	-	-		
21				-	-	-	-	-	-	-	-	-
22												
23	Net Rate Base	1,130,170	905,553	-	116,486	22,532	40,130	45,469	-	-	-	-
24												
		ACC Staff Interest Expense										
	Interest Expense Allocation	31,882	25,546	-	3,286	636	1,132	1,283	-	-	-	-
	Ratio of rate bases to total rate base		80.1254%	0.0000%	10.3069%	1.9937%	3.5508%	4.0232%	0.0000%	0.0000%	0.0000%	0.0000%

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Customer Classes Using ACC Staff Expenses

Exhibit
Rebuttal Schedule G-4
Page 1
Witness: Kozoman

	Totals	5/8 x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"
Operation and Maintenance Expense (from Schedule G-6, Page 1)											
Commodity	30,451	26,049	-	2,209	497	1,577	120	-	-	-	-
Demand	74,194	56,464	-	8,958	1,853	2,965	3,954	-	-	-	-
Customer	68,468	63,340	-	4,019	416	416	277	-	-	-	-
Service	3,529	3,208	-	232	26	34	30	-	-	-	-
Meter	9,016	6,689	-	869	178	675	605	-	-	-	-
Totals	185,658	155,749	-	16,287	2,970	5,667	4,985	-	-	-	-
Depreciaton Expense on Plant (from Schedule G-6, Page 2)											
Commodity	2,162	1,849	-	157	35	112	9	-	-	-	-
Demand	21,222	16,150	-	2,562	530	848	1,131	-	-	-	-
Customer	3,275	3,030	-	192	20	20	13	-	-	-	-
Service	6,687	6,078	-	440	49	64	56	-	-	-	-
Meter	2,128	1,579	-	205	42	159	143	-	-	-	-
Totals	35,474	28,687	-	3,556	676	1,203	1,352	-	-	-	-
Total Expenses (excluding Income Tax and Property Taxes)	221,132	184,436	-	19,843	3,646	6,870	6,337	-	-	-	-

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of Rate Base by Function Using ACC Staff Plant and Accumulated Depreciation

Exhibit
Rebuttal Schedule G-5
Page 1
Witness: Kozoman

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Rate Base							
Plant minus (Accumulated Depreciation Contributions in Aid of Construction Advances in Aid of Construction and Meter Deposits)	1,130,170	727,570	73,292	49,724	65,736	213,848	1,130,170
	1,130,170	727,570	73,292	49,724	65,736	213,848	1,130,170

	Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Allocation of Property Taxes to Functions							
Revenue Requirement by Function	342,865	170,775	41,679	81,074	18,115	31,223	342,865
						-	-
Total Revenue Requirement	342,865	170,775	41,679	81,074	18,115	31,223	342,865
Property Taxes Allocation	20,655	10,288	2,511	4,884	1,091	1,881	20,655

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of
Construction and Meter Deposits Using ACC Staff Plant and Accumulated Depreciation to Functions

Exhibit
Rebuttal Schedule G-5
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accum. Depr. Adjustments (Adj. 1, 5)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible												567
301.00	Organization	567	-		567	-	567	567					2,030
302.00	Franchises	2,030	-		2,030	-	2,030	2,030					-
303.00	Miscellaneous Intangibles	-	-		-	-	-	-					-
Total Intangible Plant		2,597	-		2,597	-	2,597						-
						0							-
						0							20,414
	Source of Supply												16,069
310.00	Land and Land Rights	20,414	-		20,414	0	20,414	20,414					-
311.00	Structures and Improvements	20,492	4,183		16,309	240	16,069	16,069					-
312.00	Collecting and Impounding Res.	-	-		-	-	-	-					36,451
313.00	Lakes, Rivers, Other Intakes	-	-		-	-	-	-	-				-
314.00	Wells and Springs	114,410	76,797	(1,624)	39,237	2,786	36,451	32,806	3,645				-
Total Source of Supply Plant		155,316	80,980	(1,624)	75,959	3,026	72,934						-
						0							50
						0							6,794
	Pumping												-
320.00	Land and Land Rights	50	-		50	-	50	50					163,197
321.00	Structures and Improvements	14,842	7,906		6,936	142	6,794	6,115	679				791
323.00	Other Power Production	-	-		-	-	-	-	-				31,617
325.00	Electric Pumping Equipment	270,574	102,255		168,319	5,123	163,197	146,877	16,320				-
326.00	Diesel Pumping Equipment	879	88		791	-	791	712	79				-
328.10	Gas Engine Pumping Equipment	42,994	10,466		32,528	911	31,617	28,455	3,162				-
Total Pumping Plant		329,339	120,714	-	208,625	6,175	202,449						-
					-	0							50
					-	0							-
	Water Treatment												391
330.00	Land and Land Rights	50	-		50	-	50	50					-
331.00	Structures and Improvements	-	-		-	-	-	-	-				-
332.00	Water Treatment Equipment	505	104		401	10	391	352	39				-
Total Water Treatment Plant		555	104	-	451	10	441						-
						0							539
					-	0							85
	Transmission and Distribution												113,183
340.00	Land and Land Rights	539	-		539	-	539	539					694,172
341.00	Structures and Improvements	156	70		86	1	85	76	8				-
342.00	Distribution, Reservoirs, & ST	142,420	28,084		114,336	1,153	113,183	101,865	11,318				214,438
343.00	Transmission and Distribution	939,167	236,291		702,876	8,704	694,172	624,755	69,417				65,736
344.00	Fire Mains	-	-		-	-	-						22,585
345.00	Services	272,942	55,162		217,780	3,342	214,438					214,438	-
346.00	Meters	87,950	21,151		66,799	1,063	65,736				65,736		
348.00	Hydrants	24,189	1,366		22,823	238	22,585			22,585			
349.00	Other Transmission & Distribution	-	-		-	-	-	-	-				
Total Transmission and Distribution Plant		1,467,363	342,124	-	1,125,239	14,502	1,110,737						

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Allocation of Net Plant, Advances and Contributions in Aid of Construction and Meter Deposits

Exhibit
Rebuttal Schedule G-5
Page 2a
Witness: Kozoman

		ACC Staff Original Cost Plant with Adjustments	Company's Accumulated Depreciation	ACC Staff Original Cost Accumulated Depr. Adj. (Adj. 1, 5)	Net Plant Values	Company's Additional Post-Closing Accumulated Depreciation	Total Net Plant Values	Demand	Commodity	Customer	Meter	Service	Totals
ALLOCATED COMMON PLANT													
Maricopa Common Plant													
389.00	Land and Land Rights	26	-		26	-	26	26					26
390.00	Structures and Improvements	17,767	1,650		16,117	7	16,110	16,110					16,110
391.00	Office Funiture and Equipment	8,530	1,912		6,618	188	6,430			6,430			6,430
391.10	Computer Equipment	13,194	(2,306)		15,500	943	14,557			14,557			14,557
392.00	Transportation Equipment	9,535	5,507		4,028	2,145	1,883	471		1,412			1,883
393.00	Stores Equipment	152	41		111	68	42			42			42
394.00	Tools, Shop and Garage	2,181	97		2,084	139	1,945			1,945			1,945
395.00	Laboratory Equipment	691	122		569	-	569			569			569
396.00	Power Operated Equipment	638	227		411	-	411	103		308			411
397.00	Communication Equipment	3,848	1,764		2,084	62	2,021	505		1,516			2,021
398.00	Miscellaneous Equipment	1,470	681	413	376	16	359			359			359
Total Common Plant		58,032	9,696	413	47,923	3,569	44,354						-
ADFUC adjustment 3/95 *					-		-						-
Well not in service					-	(9,330)	9,330	9,330					9,330
Plant 3/95			(1,674)		1,674		1,674	1,674					1,674
	TOTAL WATER PLANT	2,013,202	551,945	(1,211)	1,462,468	17,952	1,444,516	1,009,951	104,668	49,724	65,736	214,438	1,444,516
Total Plant		2,013,202			1,462,468								
	Adjustments to Accumulated Depreciation												
Company's additional Accumulated Depreciation Adjustment			17,952		(17,952)								-
			569,897										
	Total Net Plant				1,444,516								
	Advances in Aid of Construction				170,081		(170,081)	(153,073)	(17,008)				(170,081)
	Contributions in Aid of Construction				143,675		(143,675)	(129,308)	(14,368)				(143,675)
	Customer Meter Deposits				590		(590)					(590)	(590)
	Total Rate Base				1,130,170		1,130,170	727,570	73,292	49,724	65,736	213,848	1,130,170

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
Allocation of ACC Staff Expenses to Functions

Exhibit
Rebuttal Schedule G-6
Page 1
Witness: Kozoman

		ACC Staff Adjusted	Demand	Commodity	Customer	Meter	Service	Totals
Salaries and Wages	(a)	60,229	31,985	3,554	20,356	4,334	-	60,229
Purchased Water		-		-				-
Purchased Power		20,771		20,771				20,771
Chemicals		16		16				16
Repairs and Maintenance	(b)	18,029	12,464	1,385	-	651	3,529	18,029
Office Supplies and Expense		9,145			9,145			9,145
Outside Services		12,759			12,759			12,759
Service Company Charges		-	-	-	-	-	-	-
Water Testing		1,420		1,420				1,420
Rents		3,454			3,454			3,454
Transportation Expenses		-			-			-
Insurance - General Liability		2,143			2,143			2,143
Insurance - Health and Life		-	-		-			-
Regulatory Commission Expense - Rate Case		1,680			1,680			1,680
Miscellaneous Expense		29,729	15,787	1,754	10,048	2,139	-	29,729
Depreciation Expense, Allocated on Rebuttal Schedule G-6, Page 2								-
Taxes Other Than Income	(a)	26,283	13,958	1,551	8,883	1,891	-	26,283
Property Taxes, Allocated on Rebuttal Schedules G-1 & G-2				-	-			-
Income Tax, Allocated on Rebuttal Schedules G-1 & G-2								
		185,658	74,194	30,451	68,468	9,016	3,529	185,658

(a) Labor (Wages and Salaries) factor computations shown on Rebuttal Schedule G-7, Page 2a
(b) Repairs and Maintenance allocation factors computation shown on Rebuttal Schedule G-7, Page 2a

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciatio Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	Intangible										-
301.00	Organization	567		-							-
302.00	Franchises	2,030		-							-
303.00	Miscellaneous Intangibles	-		-							-
	Subtotal Intangible	2,597		-							-
											-
	Source of Supply										-
310.00	Land and Land Rights	20,414		-							-
311.00	Structures and Improvements	20,492	2.400%	492	492	492					492
312.00	Collecting and Impounding Res.	-		-	-	-					-
313.00	Lakes, Rivers, Other Intakes	-		-	-						-
314.00	Wells and Springs	114,410	3.080%	3,524	3,524	3,171	352				3,524
	Subtotal Source of Supply	155,316		4,016							-
											-
	Pumping										-
320.00	Land and Land Rights	50		-	-						-
321.00	Structures and Improvements	14,842	1.940%	288	288	259	29				288
323.00	Other Power Production	-		-	-	-	-				-
325.00	Electric Pumping Equipment	270,574	4.240%	11,472	11,472	10,325	1,147				11,472
326.00	Diesel Pumping Equipment	879	5.000%	44	44	40	4				44
328.10	Gas Engine Pumping Equipment	42,994	4.240%	1,823	1,823	1,641	182				1,823
	Subtotal Pumping	329,339		13,627							-
											-
	Water Treatment										-
330.00	Land and Land Rights	50		-	-						-
331.00	Structures and Improvements	-	0.000%	-	-	-	-				-
332.00	Water Treatment Equipment	505	4.001%	20	20	18	2				20
	Subtotal Water Treatment	555		20							-
											-
	Transmission and Distribution										-
340.00	Land and Land Rights	539		-	-						-
341.00	Structures and Improvements	156	1.920%	3	3	3	0				3
342.00	Distribution, Reservoirs, & ST	142,420	1.620%	2,307	2,307	2,076	231				2,307
343.00	Transmission and Distribution	939,167	1.970%	18,502	18,502	16,651	1,850				18,502
344.00	Fire Mains	-		-	-						-
345.00	Services	272,942	2.450%	6,687	6,687					6,687	6,687
346.00	Meters	87,950	2.420%	2,128	2,128				2,128		2,128
348.00	Hydrants	24,189	1.970%	477	477			477			477
349.00	Other Transmission & Distribution	-		-	-	-	-				-
	Subtotal Transmission and Distribution	1,467,363		30,104							

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Allocation of Depreciation Expense Using ACC Plant and Depreciation Rates to Functions

Exhibit
Rebuttal Schedule G-6
Page 2a
Witness: Kozoman

Account No.	Description	ACC Staff Original Cost	Depreciation Rate	Depreciation Expense	Total Depr. Expense	Demand	Commodity	Customer	Meter	Service	Totals
	General										
389.00	Land and Land Rights	26		-							-
390.00	Structures and Improvements	17,767	2.890%	513	513	513					513
391.00	Office Funiture and Equipment	8,530	3.280%	280	280			280			280
391.10	Computer Equipment	13,194	3.280%	433	433			433			433
392.00	Transportation Equipment	9,535	25.000%	2,384	2,384	596		1,788			2,384
393.00	Stores Equipment	152	4.000%	6	6			6			6
394.00	Tools, Shop and Garage	2,181	3.420%	75	75			75			75
395.00	**Laboratory Equipment (a)**	**691**	**0.000%**	-	-			-			-
396.00	**Power Operated Equipment (a)**	**638**	**0.000%**	-	-	-		-			-
397.00	Communication Equipment	3,848	5.030%	194	194	48		145			194
398.00	Miscellaneous Equipment	1,470	4.930%	72	72			72			72
	Subtotal General	58,032		3,956				-			
								-			-
	Amortization of Deferred Regulatory Assets	4,596	2.577%	118	118	118					118
	Depreciation of well not-in-service	64,945	3.080%	(2,000)	(2,000)	(1,800)	(200)				(2,000)
	Subtotals	2,082,743		49,841							-
				-							
				-							
						-					-
						-					-
					-	-					-
	Less: Amotization of Contributions	143,675	10.00%	(14,368)	(14,368)	(12,931)	(1,437)				(14,368)
	Total Depreciation Expense			35,474	35,474	21,222	2,162	3,275	2,128	6,687	35,474

(a) No Explanation give in testimony why there is not depreciation on these assets.

Arizona American - Tubac Water
Test Year Ended December 31, 2001
SUMMARY OF COMMODITY - DEMAND METHOD FUNCTION FACTORS

Exhibit
Rebuttal Schedule G-7
Page 1
Witness: Kozoman

Line No.	Description	5/8" x 3/4"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	Totals
1												
2												
3	Commodity	85.543%	0.000%	7.253%	1.632%	5.178%	0.394%	0.000%	0.000%	0.000%	0.00%	100.00%
4	Demand	76.103%	0.000%	12.073%	2.498%	3.997%	5.329%	0.000%	0.000%	0.000%	0.00%	100.00%
5	Customer	92.510%	0.000%	5.870%	0.607%	0.607%	0.405%	0.000%	0.000%	0.000%	0.00%	100.00%
6	Services	90.898%	0.000%	6.581%	0.731%	0.950%	0.840%	0.000%	0.000%	0.000%	0.00%	100.00%
7	Meters	74.188%	0.000%	9.640%	1.971%	7.491%	6.710%	0.000%	0.000%	0.000%	0.00%	100.00%
8												
9												
10												
11												
12												
13												

Arizona American - Tubac Water
Test Year Ended December 31, 2001
COMMODITY - DEMAND METHOD FUNCTION FACTORS
Plant and Depreciation Expense Allocations

Exhibit
Rebuttal Schedule G-7
Page 2
Witness: Kozoman

Line No.	Description	Total	Demand	Commodity	Customer
3	Wells	1.00	0.90	0.10	
4	Pumps & Equipment	1.00	0.90	0.10	
5	Distribution Mains	1.00	0.90	0.10	
6	Customer	1.00			1.00
7	Services	1.00			1.00
8	Meters	1.00			1.00
9	Fire Hydrants	1.00			1.00
10	Transportation Equip.	1.00	0.25		0.75
11	Office Furniture	1.00			1.00
12	Communication Equip.	1.00	0.25		0.75

To Approximately Match ACC Staff Proposed Rates for 5/8 Inch Meter

Demand and Commodity Allocation to Wells, Pumps and Equipment and Distribution Mains would need to be changed to approximately match ACC Staff's proposed monthly minimums and commodity rates. The match would be ACC Staff's Proposed Rates to Computed Monthly Minimum and Commodity rate WITHOUT Equity returns and Income Taxes. Match would be based on cost only.

Required Allocations:

Description	Total	Demand	Commodity	Customer
Wells	1.00	0.13	0.87	
Pumps & Equipment	1.00	0.13	0.87	
Distribution Mains	1.00	0.13	0.87	

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 2a
Witness: Kozoman

Labor Allocation Factors	
Pumping Labor	59.01%
Meter Labor	7.20%
Customer Labor	33.80%
	100.00%

Repairs and Maintenance Allocation Factors	
Repairs and Maintenance Demand	0.00%
Repairs and Maintenance Pumping	67.92%
Repairs and Maintenance Mains	8.90%
Repairs and Maintenance Services	19.57%
Repairs and Maintenance Meters	3.61%
Repairs and Maintenance Customer	0.00%
	100.00%

Computations shown on this work sheet are from page labeled asTrial Balance in this work book. Allocation percentage were computed based on Expenses charged by Citizens Utilities and are then applied to proforma amounts.

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study, Using Commodity Demand Method
DEVELOPMENT OF CLASS ALLOCATION FACTORS

Exhibit
Rebuttal Schedule 7
Page 3
Witness: Kozoman

COMMODITY ALLOCATION FACTOR

Meter Size	(a) Total Gallons (in 1,000's) In Test Year	Percent of Total
5/8" x 3/4"	69,554	85.54%
3/4"	-	0.00%
1"	5,897	7.25%
1-1/2"	1,327	1.63%
2"	4,210	5.18%
3"	320	0.39%
4"	-	0.00%
6"	-	0.00%
8"	-	0.000%
10"	-	0.000%
Totals	81,308	100.00%

DEMAND ALLOCATION FACTOR

Meter Size	(a) Number of Meters and/or Services	Equiv-alent Weight	Equivalent Number of Meters and/or Services	Percent of Total
5/8" x 3/4	457	1.0	457	76.10%
3/4"	-	1.5	0	0.00%
1"	29	2.5	73	12.07%
1-1/2"	3	5.0	15	2.50%
2"	3	8.0	24	4.00%
3"	2	16.0	32	5.33%
4"	-	25.0	0	0.00%
6"	-	50.0	0	0.00%
8"	-	80.0	0	0.00%
10"	-	160.0	0	0.00%
Totals	494		601	100.00%

CUSTOMER ALLOCATION FACTOR

Meter Size	Number of Meters	Percent of Total
5/8" x 3/4"	457	92.51%
3/4"	0	0.00%
1"	29	5.87%
1-1/2"	3	0.61%
2"	3	0.61%
3"	2	0.40%
4"	0	0.00%
6"	0	0.00%
8"	0	0.00%
10"	0	0.00%
Totals	494	100.00%

SERVICES ALLOCATION FACTOR (b)

Meter Size	Number of Services	Install-ation Cost	Weighted Number Services	Percent of Total
5/8" x 3/4	457	$ 355.00	162,235	90.90%
3/4"	0	355.00	0	0.00%
1"	29	405.00	11,745	6.58%
1-1/2"	3	435.00	1,305	0.73%
2"	3	565.00	1,695	0.95%
3"	2	750.00	1,500	0.84%
4"	0	1,090.00	0	0.00%
6"	0	1,600.00	0	0.00%
8"	0	1,600.00	0	0.00%
10"	0	1,600.00	0	0.00%
Totals	494		178,480	100.00%

METER ALLOCATION FACTOR (b)

Meter Size	Number of Meters	Meter Cost	Weighted Dollars of Meters	Percent of Total
5/8" x 3/4"	457	$ 105.00	47,985	74.19%
3/4"	0	105.00	0	0.00%
1"	29	215.00	6,235	9.64%
1-1/2"	3	425.00	1,275	1.97%
2"	3	1,615.00	4,845	7.49%
3"	2	2,170.00	4,340	6.71%
4"	0	3,095.00	0	0.00%
6"	0	6,070.00	0	0.00%
8"	0	6,070.00	0	0.00%
10"	0	6,070.00	0	0.00%
Totals	494		64,680	100.00%

(a) Includes customer and gallon sold annualization

(b) Meter and Service Line cost from Arizona Corporation Commission Memo of April 23, 2002 from Marlin Scott, Jr.. Meter costs based on compound meters. Cost of service line and

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Including Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	49,724	213,848	65,736	329,308
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	1,402	6,031	1,854	9,286
4	Rate Bases	49,724	213,848	65,736	329,308
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	1,870	8,041	2,472	12,382
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	3,045	13,095	4,025	20,166
9					
10	Revenue Requirement for Debt Component, from Line 3	1,402	6,031	1,854	9,286
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	3,045	13,095	4,025	20,166
13	Total Return Requirement with Income Tax	4,447	19,126	5,879	29,452
14					
15	Property Tax Expense, from Schedule G-5, Page 1	4,884	1,881	1,091	7,856
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	68,468	3,529	9,016	81,013
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	3,275	6,687	2,128	12,091
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	81,074	31,223	18,115	130,412
19					
20	**Customer Charge**				
21	Number of Bills = 494 times 12	5,928			
22					
23	**Charge per Bill**	$ 13.68			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 601 times 12		7,206	7,206	
28					
29	**Charge per Equivalent Meter**		$ 4.33	$ 2.51	
30					
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge)				
34	Charge per Bill (Customer Charge with Equity Return and Income Tax)	$ 13.68			
35	Charge per Equivalent Meter (For Service Line Charge with Equity Return and Income Tax)	4.33			
36	Charge per Equivalent Meter (For Meter Charge with Equity Return and Income Tax)	2.51			
37	(Service and Meter Revenue Requirement divided by Annual Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter	$ 20.52			
39					

Arizona American - Tubac Water
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Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Excluding Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Rebuttal Schedule G-8
Page 1a
Witness: Kozoman

Line No.		Customer	Service	Meter	Totals
1	Rate Bases from Schedule G-5, Page 1	49,724	213,848	65,736	329,308
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	1,402	6,031	1,854	9,286
4	Rate Bases	49,724	213,848	65,736	329,308
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	0.00%	0.00%	0.00%	0.00%
6	Required Operating Income for Equity	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-
9					
10	Revenue Requirement for Debt Component, from Line 3	1,402	6,031	1,854	9,286
11	Revenue Requirement for Equity and Income				
12	Tax Component, from Line 8	-	-	-	-
13	Total Return Requirement with Income Tax	1,402	6,031	1,854	9,286
14					
15	Property Tax Expense, from Schedule G-5, Page 1	4,884	1,881	1,091	7,856
16	Customer, Services and Meter Expenses (From Sch. G-6. Page 1)	68,468	3,529	9,016	81,013
17	Dep. & Amort. Exp. / Customer, Services, and Meter Plant (From Sch. G-6, Page 2)	3,275	6,687	2,128	12,091
18	Total Revenue Requirement / Customer, Meter & Service (Line 13+15+16+17)	78,029	18,127	14,090	110,246
19					
20	**Customer Charge**				
21	Number of Bills = 494 times 12	5,928			
22					
23	**Charge per Bill**	$ 13.16			
24	(Customer Revenue Requirement divided by Annualized Number of Bills)				
25					
26	**Service Line and Meter Charge**				
27	Equivalent 5/8 x 3/4 Meters 601 times 12		7,206	7,206	
28					
29	**Charge per Equivalent Meter**		$ 2.52	$ 1.96	
30	**Actual Cost (without Equity Return or Income Taxes)**				
31					
32	**CUSTOMER CHARGE:**				
33	Monthly Minimum for 5/8 x 3/4 Inch Meter (with no water included in Minimum or Demand Charge, nor recovery of return or income tax)				
34	Charge per Bill (Customer Charge without Equity Return or Income Tax)	$ 13.16			
35	Charge per Equivalent Meter (For Service Line Charge without Equity Return or Income Tax)	2.52			
36	Charge per Equivalent Meter (For Meter Charge without Equity Return or Income Tax)	1.96			
37	(Service and Meter Revenue Requirement divided by Annualized Equivalent Meters)				
38	Monthly Minimum for 5/8 x 3/4 Inch Meter without recovery of Equity Return or Income Tax	$ 17.63			

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter Function Costs, Including Equity Return and Income Taxes Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	727,570
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	20,517
5	Rate Base	727,570
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%
7	Required Operating Income for Equity	27,357
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	44,554
10		
11	Revenue Requirement for Debt Component, from Line 4	20,517
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	44,554
14		
15	Property Tax Expense, from Schedule G-5, Page 1	10,288
16	Demand Expenses, from Schedule G-6, Page 1	74,194
17	Depreciation, from Schedule G-6, Page 2	21,222
18	Totals	170,775
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	7,206
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 23.70
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 23.70	1.0	$ 23.70
26	3/4 Inch Meter	$ 23.70	1.5	35.55
27	1 Inch Meter	$ 23.70	2.5	59.25
28	1 1/2 Inch Meter	$ 23.70	5.0	118.49
29	2 Inch Meter	$ 23.70	8.0	189.59
30	3 Inch Meter	$ 23.70	15.0	355.48
31	4 Inch Meter	$ 23.70	25.0	592.47
32	6 Inch Meter	$ 23.70	50.0	1,184.95
33	8 Inch Meter	$ 23.70	80.0	1,895.92
34	10 Inch Meter	$ 23.70	160.0	3,791.83

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Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation of Monthly Minimums for Customer, Service, Meter
Function Costs, Excluding Equity Return and Income Taxes Using ACC
Staff's recommened Plant, Accumulated Depreciation and Expenses & Return

Exhibit
Schedule G-8
Page 2a
Witness: Kozoman

Line No.	DEMAND CHARGE:	
1		
2	Rate Base (From Schedule G-5, Page 1)	727,570
3	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%
4	Required Operating Income - for Debt (Line 2 x Line 3)	20,517
5	Rate Base	727,570
6	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	
7	Required Operating Income for Equity	-
8	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863
9	Equity Return plus Income tax component (Line 7 x Line 8)	-
10		
11	Revenue Requirement for Debt Component, from Line 4	20,517
12	Revenue Requirement for Equity and Income	
13	Tax Component, from Line 12	-
14		
15	Property Tax Expense, from Schedule G-5, Page 1	10,288
16	Demand Expenses, from Schedule G-6, Page 1	74,194
17	Depreciation, from Schedule G-6, Page 2	21,222
18	Totals	126,221
19	Total Revenue Requirement / Demand Component	
20	Equivalent Number of 5/8 x 3/4 Meters	7,206
21	Demand Charge for 5/8 x 3/4 Inch Meter	$ 17.52
22		

23		5/8" Demand	Meter	Demand
24	Demand Charge Per Equivalent	Charge	Ratio	Charge
25	5/8 x 3/4 Inch Meter	$ 17.52	1.0	$ 17.52
26	3/4 Inch Meter	$ 17.52	1.5	26.27
27	1 Inch Meter	$ 17.52	2.5	43.79
28	1 1/2 Inch Meter	$ 17.52	5.0	87.58
29	2 Inch Meter	$ 17.52	8.0	140.13
30	3 Inch Meter	$ 17.52	15.0	262.74
31	4 Inch Meter	$ 17.52	25.0	437.90
32	6 Inch Meter	$ 17.52	50.0	875.80
33	8 Inch Meter	$ 17.52	80.0	1,401.28
34	10 Inch Meter	$ 17.52	160.0	2,802.57

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including and Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 3
Witness: Kozoman

Including Equity Return and Income Taxes

Line No.		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended onthly Mininum to ComputedCost
1	5/8 x 3/4 Inch Meter	$ 13.68	$ 4.33	$ 2.51	$ 23.70	$ 44.22	$ 20.80	47.04%
2	3/4 Inch Meter	13.68	6.50	3.77	35.55	59.50	20.80	34.96%
3	1 Inch Meter	13.68	10.83	6.28	59.25	90.04	31.17	34.62%
4	1 1/2 Inch Meter	13.68	21.66	12.57	118.49	166.40	62.33	37.46%
5	2 Inch Meter	13.68	34.66	20.11	189.59	258.04	102.98	39.91%
6	3 Inch Meter	13.68	64.99	37.71	355.48	471.86	121.95	25.84%
7	4 Inch Meter	13.68	108.32	62.85	592.47	777.32	178.85	23.01%
8	6 Inch Meter	13.68	216.64	125.69	1,184.95	1,540.96	243.89	15.83%
9	8 Inch Meter	13.68	346.63	301.67	1,895.92	2,557.89	$ 2,079.62	
10	10 Inch Meter	13.68	#####	1,005.56	3,791.83	5,850.95		
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								

Excluding Equity Return and Income Taxes

		Customer Charge	Service Line Charge	Meter Charge	Demand Charge	Total Computed Monthly Minimum Charge	ACC Staff Recommended Monthly Minimum Charge	Ratio of ACC Staff Recommended onthly Mininum to ComputedCost
22	5/8 x 3/4 Inch Meter	$ 13.16	$ 2.52	$ 1.96	$ 17.52	$ 35.15	$ 20.80	59.18%
23	3/4 Inch Meter	13.16	3.77	2.93	26.27	46.14	20.80	45.07%
24	1 Inch Meter	13.16	6.29	4.89	43.79	68.13	31.17	45.75%
25	1 1/2 Inch Meter	13.16	12.58	9.78	87.58	123.10	62.33	50.63%
26	2 Inch Meter	13.16	20.12	15.64	140.13	189.06	102.98	54.47%
27	3 Inch Meter	13.16	37.73	29.33	262.74	342.97	121.95	35.56%
28	4 Inch Meter	13.16	62.89	48.88	437.90	562.84	178.85	31.78%
29	6 Inch Meter	13.16	125.78	97.76	875.80	1,112.51	243.89	21.92%
30	8 Inch Meter	13.16	201.25	156.42	1,401.28	1,772.12		
31	10 Inch Meter	13.16	402.49	312.84	2,802.57	3,531.07		

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Including Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and
Expenses and Return

Exhibit
Schedule G-8
Page 4
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	73,292	49,724	213,848	65,736	727,570	1,130,170
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.820%	2.820%	2.820%	2.820%	2.820%	2.820%
3	Required Operating Income - for Debt	2,067	1,402	6,031	1,854	20,517	31,871
4	Rate Bases from Schedule G-5, Page 1	73,292	49,724	213,848	65,736	727,570	1,130,170
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)	3.76%	3.76%	3.76%	3.76%	3.76%	3.76%
6	Required Operating Income for Equity	2,756	1,870	8,041	2,472	27,357	42,494
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	1.62863	1.62863	1.62863	1.62863	1.62863	1.62863
8	Equity Return plus Income tax component (Line 6 x Line 7)	4,488	3,045	13,095	4,025	44,554	69,208
9							
10	Revenue Requirement for Debt Component, from Line 3	2,067	1,402	6,031	1,854	20,517	31,871
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	4,488	3,045	13,095	4,025	44,554	69,208
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	6,555	4,447	19,126	5,879	65,071	101,078
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	2,511	4,884	1,881	1,091	10,288	20,655
16	Expenses (From Sch. G-6. Page 1)	30,451	68,468	3,529	9,016	74,194	185,658
17	Depreciation and Amortization (From Schedule G-6, Page 2)	2,162	3,275	6,687	2,128	21,222	35,474
18	Total Revenue Requirement by function	41,679	81,074	31,223	18,115	170,775	342,865
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	81,308	5,928	7,206	7,206	7,206	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.5126					
22	(Line 18 divided by Line 20)		$ 13.68	$ 4.33	$ 2.51	$ 23.70	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 44.22	
24							

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Cost of Service Study Using Commodity / Demand Method
Computation Demand Charge and Commodity
Function Costs, Excluding Equity Return and Income Taxes
Using ACC Staff's recommened Plant, Accumulated Depreciation and Expenses and Return

Exhibit
Schedule G-8
Page 4a
Witness: Kozoman

Line No.		Commodity	Customer	Service	Meter	Demand	Totals
1	Rate Bases from Schedule G-5, Page 1	73,292	49,724	213,848	65,736	727,570	1,130,170
2	Multiply by weighted Rate of Return for Debt (From ACC Staff JMR-9)	2.82%	2.82%	2.82%	2.82%	2.82%	2.82%
3	Required Operating Income - for Debt	2,067	1,402	6,031	1,854	20,517	31,871
4	Rate Bases from Schedule G-5, Page 1	73,292	49,724	213,848	65,736	727,570	1,130,170
5	Weighted Rate of Return for Equity (From ACC Staff JMR-9)						
6	Required Operating Income for Equity	-	-	-	-	-	-
7	Multiply by Revenue Conversion Factor (From ACC Staff DWC-1)	-	-	-	-	-	-
8	Equity Return plus Income tax component (Line 6 x Line 7)	-	-	-	-	-	-
9							
10	Revenue Requirement for Debt Component, from Line 3	2,067	1,402	6,031	1,854	20,517	31,871
11	Revenue Requirement for Equity and Income						
12	Tax Component, from Line 8	-	-	-	-	-	-
13	Total Return Requirement with Income Tax (Line 10 + Line 12)	2,067	1,402	6,031	1,854	20,517	31,871
14							
15	Property Taxes (Allocation from Schedule G-5, Page 1)	2,511	4,884	1,881	1,091	10,288	20,655
16	Expenses (From Sch. G-6. Page 1)	30,451	68,468	3,529	9,016	74,194	185,658
17	Depreciation and Amortization (From Schedule G-6, Page 2)	2,162	3,275	6,687	2,128	21,222	35,474
18	Total Revenue Requirement by function	37,190	78,029	18,127	14,090	126,221	273,657
19							
20	Gallons Sold (Zero Gallons in Minimum), Bills, Equivalent Meters & Servic	81,308	5,928	7,206	7,206	7,206	
21	Computed Commodity Rate, Customer, Meter, Service Line & Demand	$ 0.4574					
22	(Line 18 divided by Line 20)		$ 13.1628	$ 2.5156	$ 1.9553	$ 17.5161	
23	Total Monthly Minimum Charge (Sum of Customer, Service, Meter and Demand Charge on Line 22)					$ 35.15	

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **without** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 1
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4a	$0.4574
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	$ 17.52
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	13.16
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	2.52
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4a	1.96
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4a	$ 35.15

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 20.80
Proposed Commodity Rate			
0	to	4,000	$ 1.81
4,001	to	100,000	$ 2.72
Over 100,001			$ 3.26

Computed Costs, without Equity Return or Income Taxes

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	Recovery of Expenses *or,* (Lack of Recovery)
22	-	$ 35.15	-	$ 35.15		-	$ 20.80		$ 20.80	$ (14.35)
23	1,000	$ 35.15	$0.4574	$ 35.61		1,000	20.80	$ 1.81	22.61	(13.00)
24	2,000	35.15	0.91	36.06		2,000	20.80	3.62	24.42	(11.64)
25	3,000	35.15	1.37	36.52		3,000	20.80	5.43	26.23	(10.29)
26	4,000	35.15	1.83	36.98		4,000	20.80	7.24	28.04	(8.94)
27	5,000	35.15	2.29	37.44		5,000	20.80	9.96	30.76	(6.68)
28	6,000	35.15	2.74	37.89		6,000	20.80	12.68	33.48	(4.41)
29	7,000	35.15	3.20	38.35	**Usage**	7,000	20.80	15.40	36.20	(2.15)
30	**7,952**	35.15	3.64	38.79	**<-Level->**	**7,952**	20.80	17.99	38.79	0.00
31	8,000	35.15	3.66	38.81	**When**	8,000	20.80	18.12	38.92	0.11
32	9,000	35.15	4.12	39.27	**Revenues**	9,000	20.80	20.84	41.64	2.37
33	10,000	35.15	4.57	39.72	**Equal**	10,000	20.80	23.56	44.36	4.64
34	11,000	35.15	5.03	40.18	**Expenses**	11,000	20.80	26.28	47.08	6.90
35	12,000	35.15	5.49	40.64	**(No Rate**	12,000	20.80	29.00	49.80	9.16
36	13,000	35.15	5.95	41.10	**of Return**	13,000	20.80	31.72	52.52	11.42
37	14,000	35.15	6.40	41.55	**on**	14,000	20.80	34.44	55.24	13.69
38	15,000	35.15	6.86	42.01	**Equity**	15,000	20.80	37.16	57.96	15.95
39	16,000	35.15	7.32	42.47	**or Income**	16,000	20.80	39.88	60.68	18.21
40	17,000	35.15	7.78	42.93	**Taxes**	17,000	20.80	42.60	63.40	20.47
41	18,000	35.15	8.23	43.38	**Included)**	18,000	20.80	45.32	66.12	22.74
42	19,000	35.15	8.69	43.84		19,000	20.80	48.04	68.84	25.00
43	20,000	35.15	9.15	44.30		20,000	20.80	50.76	71.56	27.26
44	21,000	35.15	9.61	44.76		21,000	20.80	53.48	74.28	29.52
45	22,000	35.15	10.06	45.21		22,000	20.80	56.20	77.00	31.79
46	23,000	35.15	10.52	45.67		23,000	20.80	58.92	79.72	34.05
47	24,000	35.15	10.98	46.13		24,000	20.80	61.64	82.44	36.31
48	25,000	35.15	11.44	46.58		25,000	20.80	64.36	85.16	38.58
49	26,000	35.15	11.89	47.04		26,000	20.80	67.08	87.88	40.84
50	27,000	35.15	12.35	47.50		27,000	20.80	69.80	90.60	43.10
51	28,000	35.15	12.81	47.96		28,000	20.80	72.52	93.32	45.36
52	29,000	35.15	13.26	48.41		29,000	20.80	75.24	96.04	47.63
53	30,000	35.15	13.72	48.87		30,000	20.80	77.96	98.76	49.89
54	**Average Usage**					**Average Usage**				
55	13,177	35.15	6.03	41.18		13,177	20.80	32.20	53.00	**11.82**

Arizona American - Tubac Water
Test Year Ended December 31, 2001
Comparison of ACC Staff Proposed Rates to Computed Rates from Cost of Service Study
to Computed Rates from Cost of Service Study **with** Equity Return and Income Taxes

Exhibit
Rebuttal Schedule G-9
Page 2
Witness: Kozoman

Line No.		
1	Computed Commodity Cost from Rebuttal Schedule G-8, Page 4	$ 0.5126
2	Computed Demand Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	$ 23.70
3	Computed Customer Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	13.68
4	Computed Service Line Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	2.51
5	Computed Meter Cost for 5/8 Inch Meter from Rebuttal Schedule G-8, Page 4	4.33
6	Computed Monthly Minimum Charge with zero gallons in minimum from Rebuttal Schedule G-8, Page 4	$ 44.22

ACC Staff Proposed Rates

Proposed Monthly Minimum for 5/8" Meter			$ 20.80
Proposed Commodity Rate			
0	to	4,000	$ 1.81
4,001	to	100,000	$ 2.72
Over 100,001			$ 3.26

Computed Costs, with Equity Return and Income Taxes

	Col. 1	Col. 2	Col. 3	Col. 4 (Col. 2+ 3)		Col. 5	Col. 6	Col. 7	Col. 8 (Col. 6 + 7	Col. 9 (Col, 8-4) Recovery of Expenses Rate of Return & Income Tax or (Lack of Recovery)
	Usage	Monthly Minimum Revenue	Commodity Revenue	Total Cost of Service		Usage	Monthly Minimum Revenue	Commodity Revenue	Total Revenue	
24	-	$ 44.22	-	$ 44.22		-	$ 20.80		$ 20.80	$ (23.42)
25	1,000	$ 44.22	$ 0.5126	$ 44.73		1,000	20.80	$ 1.81	22.61	(22.12)
26	2,000	44.22	1.03	45.25		2,000	20.80	3.62	24.42	(20.83)
27	3,000	44.22	1.54	45.76		3,000	20.80	5.43	26.23	(19.53)
28	4,000	44.22	2.05	46.27		4,000	20.80	7.24	28.04	(18.23)
29	5,000	44.22	2.56	46.79		5,000	20.80	9.96	30.76	(16.03)
30	6,000	44.22	3.08	47.30		6,000	20.80	12.68	33.48	(13.82)
31	7,000	44.22	3.59	47.81		7,000	20.80	15.40	36.20	(11.61)
32	8,000	44.22	4.10	48.32		8,000	20.80	18.12	38.92	(9.40)
33	9,000	44.22	4.61	48.84		9,000	20.80	20.84	41.64	(7.20)
34	10,000	44.22	5.13	49.35		10,000	20.80	23.56	44.36	(4.99)
35	11,000	44.22	5.64	49.86		11,000	20.80	26.28	47.08	(2.78)
36	12,000	44.22	6.15	50.37	**Usage**	12,000	20.80	29.00	49.80	(0.57)
37	**12,260**	44.22	6.28	50.51	**<-Level->**	**12,260**	20.80	29.71	50.51	0.00
38	13,000	44.22	6.66	50.89	**When**	13,000	20.80	31.72	52.52	1.63
39	14,000	44.22	7.18	51.40	**Revenues**	14,000	20.80	34.44	55.24	3.84
40	15,000	44.22	7.69	51.91	**Equal**	15,000	20.80	37.16	57.96	6.05
41	16,000	44.22	8.20	52.42	**Expenses**	16,000	20.80	39.88	60.68	8.26
42	17,000	44.22	8.71	52.94	**and**	17,000	20.80	42.60	63.40	10.46
43	18,000	44.22	9.23	53.45	**Return**	18,000	20.80	45.32	66.12	12.67
44	19,000	44.22	9.74	53.96	**on Equity**	19,000	20.80	48.04	68.84	14.88
45	20,000	44.22	10.25	54.47	**and**	20,000	20.80	50.76	71.56	17.09
46	21,000	44.22	10.76	54.99	**Income**	21,000	20.80	53.48	74.28	19.29
47	22,000	44.22	11.28	55.50	**Taxes**	22,000	20.80	56.20	77.00	21.50
48	23,000	44.22	11.79	56.01		23,000	20.80	58.92	79.72	23.71
49	24,000	44.22	12.30	56.52		24,000	20.80	61.64	82.44	25.92
50	25,000	44.22	12.82	57.04		25,000	20.80	64.36	85.16	28.12
51	26,000	44.22	13.33	57.55		26,000	20.80	67.08	87.88	30.33
52	27,000	44.22	13.84	58.06		27,000	20.80	69.80	90.60	32.54
53	28,000	44.22	14.35	58.58		28,000	20.80	72.52	93.32	34.74
54	**Average Usage**					**Average Usage**				
55	13,177	$ 44.22	$ 6.75	$ 50.98		13,177	$ 20.80	$ 32.20	$ 53.00	**$ 2.02**

Arizona American - Tubac
Summary of Revenues by Customer Classification - Present and Proposed Rates
With Annualized Revenues to Year End Number of Customers
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Meter Size	Customer Classification	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8 Inch	Residential	$ 192,378	$ 334,948	$ 142,569	74.11%	76.54%	76.89%
2	1 Inch	Residential	11,339	19,744	8,405	74.12%	4.51%	4.53%
3	1.5 Inch	Residential	1,501	2,613	1,112	74.10%	0.60%	0.60%
4	2 Inch	Residential	1,671	2,910	1,239	74.14%	0.66%	0.67%
5	3 Inch	Residential	1,255	2,186	931	74.22%	0.50%	0.50%
6								
7	5/8 Inch	Commercial	20,444	35,598	15,154	74.12%	8.13%	8.17%
8	1 Inch	Commercial	6,953	12,106	5,153	74.11%	2.77%	2.78%
9	1.5 Inch	Commercial	2,753	4,793	2,040	74.11%	1.10%	1.10%
10	2 Inch	Commercial	9,544	16,612	7,068	74.06%	3.80%	3.81%
11	3 Inch	Commercial	807	1,406	599	74.17%	0.32%	0.32%
12	Miscellaneous Revenues		2,691	2,691	-	0.00%	1.07%	0.62%
13								
14	**Subtotal of Water Revenues**		$ 251,336	$ 435,607	$ 184,270	73.32%	100.00%	100.00%
15								
16							Additional	Gallons
17	**Revenue Annualization (a)**						Billings	in 1,000's
18	5/8 Inch	Residential	$ 738	$ 1,284	547	74.13%	22	229
19	1 Inch	Residential	370	644	274	74.15%	9	93
20	5/8 Inch	Commercial	350	609	259	74.15%	12	109
21	1 Inch	Commercial	218	379	161	74.12%	4	229
22	3 Inch	Commercial	801	1,396	594	74.17%	6	137
	Total Revenue Annualization		2,476	4,312	1,836	74.15%		
23	**Total Water Revenues with**							
24	**Revenue Annualization**		$ 253,812	$ 439,919	186,106	73.32%	53	797
25								
26								

27 (a) Customer Growth Annualization is calculated by computing the change in the number of customers by month from the
28 beginning of the year to the end of the year, and them multipling the additional customers times the average revenue
29 revenue for that month.

Arizona American - Tubac
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.		Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	401	13,177	$ 39.19	$ 68.24	29.05	74.12%
2	1 Inch	Residential	18	15,301	51.17	89.11	37.94	74.13%
3	1.5 Inch	Residential	1	40,250	125.07	217.75	92.68	74.10%
4	2 Inch	Residential	1	32,500	139.26	242.51	103.25	74.14%
5	3 Inch	Residential	1	-	-	-	-	0.00%
6								
7	5/8 Inch	Commercial	53	9,090	30.85	53.73	22.88	74.14%
8	1 Inch	Commercial	10	19,172	59.07	102.85	43.78	74.11%
9	1.5 Inch	Commercial	2	35,167	114.70	199.70	85.00	74.11%
10	2 Inch	Commercial	2	159,167	397.66	692.17	294.51	74.06%
11	3 Inch	Commercial	1	22,833	133.54	232.59	99.05	74.17%
12								
13		Totals	490					
14								
15		Actuall Year End Number						
16		of Customers:	494					
17								
18		**(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.						

Arizona American - Tubac
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1	Percentage Increase in Monthly Minimums				
2	Percentage Increase in Commodity Rates				
3					
4	**Monthly Usage Charge for:**				
5	Residential,Commercial				
6	5/8 x 3/4 Inch (a)		$ 15.35	$ 26.74	74.20%
7	3/4 Inch (a)		15.35	26.74	74.20%
8	1 Inch		23.00	40.07	74.22%
9	1 1/2 Inch		46.00	80.14	74.22%
10	2 Inch		76.00	132.41	74.22%
11	3 Inch		90.00	156.81	74.23%
12	4 Inch		132.00	229.98	74.23%
13	6 Inch		180.00	313.61	74.23%
14	8 Inch		N/A	2,674.00	
15					
16					
17	Gallons In Minimum				
18	All		-	-	
19					
20	**Tier 1:** Gallons upper limit				
21	All		8,000	8,000	
22	**Tier 2:** (Gallon upper limit, up to, but not exceeding)				
23	All		999,999,999	999,999,999	
24	**Tier 3:** (Gallon over)				
25	All		999,999,999	999,999,999	
26	Commodity Rates (per 1,000 gallons over minimum and/or per Tier)				
27	All (a)	Tier 1	$ 1.66	$ 2.89	74.10%
28	All (a)	Tier 2	2.04	3.55	74.02%
29	All (a)	Tier 3	2.04	3.55	74.02%
30	All (a)	Tier 4			
31					
32	(a) Rounded to nearest whole cent				
33	In addition to above rates, Company will also collect groundwater withdrawal assessment.				

Arizona American - Tubac
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates	
1	Establishment	$ 30.00	$ 30.00	
2	Establishment (After Hours)	$ 40.00	$ 40.00	
3	Reconnection (Deliquent)			
4	Reconnection (After Hours)			
5	Meter Test	$ 10.00	$ 10.00	
6	Deposit	**	**	
7	Deposit Interest	**	**	
8	Re-Establishment (With-in 12 Months)	***	***	
9				
10	NSF Check	$ 10.00	$ 10.00	
11	Deferred Payment, Per Month **(b)**			
12	Meter Re-Read	$ 5.00	5.00	
13	Charge of Moving Customer Meter -			
14	Customer Requested	Cost	Cost	
15	Late Payment Charge, greater of 1.50% or	$ 5.00	$ 5.00	(1)
16	Damages to Meter Locks, Valves, Seals	Cost	Cost	(2)
17	Sprinklers	(a)	(a)	

18 (1) Greater of 1.50% or $5.00 Present Rates or 1.5% or $10.00 Proposed Rates.
19 (2) $40.00 plus actual cost of making repairs.
20 ** PER COMMISSION RULES (R14-2-403.B)
21 *** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)
22 IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM
23 ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE
24 TAX. PER COMMISSION RULE (14-2-409.D 5)
25 ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,
26 AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.
27 (a) 1.00% of the monthly minimum for a comparable sized meter connection, but no less than $5
28 per month.

		Present Charges		
		Service Charges		
		Installation of		Proposed
	Meter Size	Ser. Line	Meter	Charges
33	5/8 x 3/4 Inch	$ 255.00	$ 65.00	$500
34	3 / 4 Inch	$ 255.00	$ 105.00	$575
35	1 Inch	$ 275.00	$ 145.00	$600
36	1 1/2 Inch	$ 290.00	$ 345.00	$900
37	2 Inch	$ 315.00	$ 775.00	$2,220
38	3 Inch	Cost	Cost	Cost
39	4 Inch	Cost	Cost	Cost
40	6 Inch	Cost	Cost	Cost
41	8 Inch	Cost	Cost	Cost
42	Meters Larger than 8"	Cost	Cost	Cost

43
44 Company will not accept applications for 3/4" meters after May 1, 1997. Meter Size is obsolete.
45
46 As meters and service lines are now taxable income for income purposes, The Company
47 shall collect income taxes on the meter and service line charges.
48 Any tax collected will be refunded each year that the meter deposit is refunded.

Arizona American - Tubac
Summary of Revenues by Customer Classification - Present and Proposed Rates
With Annualized Revenues to Year End Number of Customers
Test Year Ended December 31, 2001
Step-One Rate Increase

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Kozoman

Line No.	Meter Size	Customer Classification	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8 Inch	Residential	$ 192,378	$ 269,354	$ 76,975	40.01%	76.54%	76.77%
2	1 Inch	Residential	11,339	15,877	4,538	40.02%	4.51%	4.53%
3	1.5 Inch	Residential	1,501	2,102	602	40.08%	0.60%	0.60%
4	2 Inch	Residential	1,671	2,340	669	40.05%	0.66%	0.67%
5	3 Inch	Residential	1,255	1,757	502	40.00%	0.50%	0.50%
6								
7	5/8 Inch	Commercial	20,444	28,621	8,177	40.00%	8.13%	8.16%
8	1 Inch	Commercial	6,953	9,738	2,785	40.05%	2.77%	2.78%
9	1.5 Inch	Commercial	2,753	3,856	1,103	40.07%	1.10%	1.10%
10	2 Inch	Commercial	9,544	13,375	3,831	40.14%	3.80%	3.81%
11	3 Inch	Commercial	807	1,131	323	40.04%	0.32%	0.32%
12	Miscellaneous Revenues		2,691	2,691	-	0.00%	1.07%	0.77%
13								
14	**Total Water Revenues**		$ 251,336	$ 350,841	$ 99,505	39.59%	100.00%	100.00%
15								
16							Additional Billings	Additional Gallons in 1,000's
17	**Revenue Annualization (a)**							
18	5/8 Inch	Residential	$ 738	$ 1,032	295	39.93%	22	229
19	1 Inch	Residential	370	518	148	39.95%	9	93
20	5/8 Inch	Commercial	350	489	140	39.90%	12	109
21	1 Inch	Commercial	218	305	87	40.01%	4	229
22	3 Inch	Commercial	801	1,122	321	40.02%	6	137
23	**Total Revenue Annualization**		2,476	3,466	990	39.97%		
24	**Total Water Revenues with**							
25	**Revenue Annualization**		$ 253,812	$ 354,307	100,495	39.59%	53	797
26								
27								

28 (a) Customer Growth Annualization is calculated by computing the change in the number of customers by month from the
29 beginning of the year to the end of the year, and them multipling the additional customers times the average revenue
30 revenue for that month.

Arizona American - Tubac
Analysis of Revenue by Detailed Class at Average Usage
Test Year Ended December 31, 2001
Step-One Rate Increase

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Kozoman

Line No.		Customer Classification and/or Meter Size	(a) Average Number of Customers at 12/31/01	Average Consumption	Revenues Present Rates	Revenues Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8 Inch	Residential	401	13,177	$ 39.19	$ 54.86	15.67	39.97%
2	1 Inch	Residential	18	15,301	51.17	71.64	20.47	39.99%
3	1.5 Inch	Residential	1	40,250	125.07	175.20	50.13	40.08%
4	2 Inch	Residential	1	32,500	139.26	195.03	55.77	40.05%
5	3 Inch	Residential	1	-	-	-	-	0.00%
6								
7	5/8 Inch	Commercial	53	9,090	30.85	43.17	12.31	39.91%
8	1 Inch	Commercial	10	19,172	59.07	82.71	23.64	40.02%
9	1.5 Inch	Commercial	2	35,167	114.70	160.66	45.96	40.07%
10	2 Inch	Commercial	2	159,167	397.66	557.30	159.64	40.14%
11	3 Inch	Commercial	1	22,833	133.54	186.98	53.44	40.02%
12								
13		Totals	490					
14								
15		Actuall Year End Number						
16		of Customers:	494					
17								
18		**(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.						

Arizona American - Tubac
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001
Step-One Rate Increase

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Kozoman

Line No.	Customer Classification and Meter Size		Present Rates	Proposed Rates	Percent Change
1	Percentage Increase in Monthly Minimums				
2	Percentage Increase in Commodity Rates				
3					
4	**Monthly Usage Charge for:**				
5	Residential,Commercial				
6	5/8 x 3/4 Inch		$ 15.35	$ 21.49	40.00%
7	3/4 Inch		15.35	21.49	40.00%
8	1 Inch		23.00	32.20	40.00%
9	1 1/2 Inch		46.00	64.40	40.00%
10	2 Inch		76.00	106.40	40.00%
11	3 Inch		90.00	126.00	40.00%
12	4 Inch		132.00	184.80	40.00%
13	6 Inch		180.00	252.00	40.00%
14			N/A	2,149.00	
15					
16					
17	Gallons In Minimum				
18	All		-	-	
19					
20	**Tier 1:** Gallons upper limit				
21	All		8,000	8,000	
22	**Tier 2:** (Gallon upper limit, up to, but not exceeding)				
23	All		999,999,999	999,999,999	
24	**Tier 3:** (Gallon over)				
25	All		999,999,999	999,999,999	
26	Commodity Rates (per 1,000 gallons over minimum and per Tier)				
27	All (a)	Tier 1	$ 1.66	$ 2.32	39.76%
28	All (a)	Tier 2	2.04	2.86	40.20%
29	All (a)	Tier 3	2.04	2.86	40.20%
30	All (a)	Tier 4	2.04	2.86	40.20%
31					
32	(a) Rounded to nearest whole cent				
33	In addition to above rates, Company will also collect groundwater withdrawal assessment.				

Arizona American - Tubac
Changes in Representative Rate Schedules
Test Year Ended December 31, 2001
Step-One Rate Increase

Exhibit
Schedule H-3
Page 2
Witness: Kozoman

Line No.	Other Service Charges	Present Rates	Proposed Rates	
1	Establishment	$ 30.00	$ 30.00	
2	Establishment (After Hours)	$ 40.00	$ 40.00	
3	Reconnection (Deliquent)			
4	Reconnection (After Hours)			
5	Meter Test	$ 10.00	$ 10.00	
6	Deposit	**		
7	Deposit Interest	**		
8	Re-Establishment (With-in 12 Months)	***		
9				
10	NSF Check	$ 10.00	$ 10.00	
11	Deferred Payment, Per Month **(b)**			
12	Meter Re-Read	$ 5.00	5.00	
13	Charge of Moving Customer Meter -			
14	Customer Requested	Cost	Cost	
15	Late Payment Charge, greater of 1.50% or	$ 5.00	$ 5.00	(1)
16	Damages to Meter Locks, Valves, Seals	Cost	Cost	(2)
17	Sprinklers	(a)	(a)	

18 (1) Greater of 1.50% or $5.00 Present Rates or 1.5% or $10.00 Proposed Rates.
19 (2) $40.00 plus actual cost of making repairs.
20 ** PER COMMISSION RULES (R14-2-403.B)
21 *** MONTHS OFF SYSTEM TIMES MINIMUM (R14-2-403.D)
22 IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM
23 ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE
24 TAX. PER COMMISSION RULE (14-2-409.D 5)
25 ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS,
26 AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.
27 (a) 1.00% of the monthly minimum for a comparable sized meter connection, but no less than $5 per month

		Present Charges		
		Service Charges		
		Installation of		Proposed
	Meter Size	Ser. Line	Meter	Charges
	5/8 x 3/4 Inch	$255.00	$ 65.00	$500
	3 / 4 Inch	$255.00	$105.00	$575
	1 Inch	$275.00	$145.00	$600
	1 1/2 Inch	$290.00	$345.00	$900
	2 Inch	$315.00	$775.00	$2,220
	3 Inch	Cost	Cost	Cost
	4 Inch	Cost	Cost	Cost
	6 Inch	Cost	Cost	Cost
	8 Inch	Cost	Cost	Cost
	Meters Larger than 8"	Cost	Cost	Cost

42
43 Company will not accept applications for 3/4" meters after May 1, 1997. Meter Size is obsolete.
44
45 As meters and service lines are now taxable income for income purposes, The Company
46 shall collect income taxes on the meter and service line charges.
47 Any tax collected will be refunded each year that the meter deposit is refunded.

FENNEMORE CRAIG
Norman D. James (No. 006901)
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3003 N. Central Avenue
Suite 2600
Phoenix, Arizona 85012
Attorneys for Arizona-American
Water Company, Inc.

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WEST WATER AND WASTEWATER DISTRICTS.	**DOCKET NOS. WS-01303A-02-0867** **WS-01303A-02-0868** **W-01303A-02-0869** **WS-01303A-02-0870** **W-01303A-02-0908**
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS.	
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER AND HAVASU WATER DISTRICTS.	**ARIZONA-AMERICAN WATER COMPANY'S BOURASSA REBUTTAL SCHEDULES**

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER, AGUA FRIA WATER AND ANTHEM/AGUA FRIA WASTEWATER DISTRICTS.
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT.

SUN CITY
WATER

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

Line No.						
1	Fair Value Rate Base				$ 44,279,756	
2						
3	Adjusted Operating Income				648,077	
4						
5	Current Rate of Return				1.46%	
6						
7	Required Operating Income				$ 3,328,066	
8						
9	Required Rate of Return on Fair Value Rate Base				7.52%	
10						
11	Operating Income Deficiency				$ 2,679,989	
12						
13	Gross Revenue Conversion Factor				1.6286	
14						
15	Increase in Gross Revenue					
16	Requirement				$ 4,364,724	
17						
18	Customer		Present	Proposed	Dollar	Percent
19	Classification		Rates	Rates	Increase	Increase
20	5/8 Inch	Residential	$ 2,662,562	$ 4,579,810	$ 1,917,248	72.01%
21	3/4 Inch	Residential	1,817	3,124	1,307	71.93%
22	1 Inch	Residential	66,498	114,318	47,819	71.91%
23	1.5 Inch	Residential	1,485,121	2,552,475	1,067,353	71.87%
24	2 Inch	Residential	632,378	1,086,839	454,461	71.87%
25	3 Inch	Residential	13,103	22,512	9,409	71.80%
26	6 Inch	Residential	6,383	10,973	4,589	71.89%
27	5/8 Inch	Commercial	25,941	44,577	18,636	71.84%
28	3/4 Inch	Commercial	3,226	5,544	2,318	71.84%
29	1 Inch	Commercial	48,884	84,060	35,176	71.96%
30	1.5 Inch	Commercial	150,893	259,380	108,487	71.90%
31	2 Inch	Commercial	280,522	482,054	201,532	71.84%
32	3 Inch	Commercial	71,578	122,990	51,412	71.83%
33	4 Inch	Commercial	71,802	123,331	51,529	71.77%
34	6 Inch	Commercial	203,846	350,119	146,273	71.76%
35	1 Inch	Irrigation	339	584	244	72.00%
36	1.5 Inch	Irrigation	98,009	168,756	70,747	72.18%
37	2 Inch	Irrigation	6,157	10,607	4,450	72.28%
38	3 Inch	Irrigation	1,142	1,965	823	72.06%
39	6 Inch	Irrigation	114,183	196,740	82,556	72.30%
40	3 Inch	Public Interruptible	3,193	5,491	2,299	72.00%
41	8 Inch	Public Interruptible	19	33	14	72.00%
42	3 Inch	Fire Protection	72	124	52	72.00%
43	4 Inch	Fire Protection	5,814	10,000	4,186	72.00%
44	6 Inch	Fire Protection	7,150	12,298	5,148	72.00%
45	8 Inch	Fire Protection	2,480	4,266	1,786	72.00%
46	Standby		2,646	4,551	1,905	72.00%
47	Miscellaneous Revenues		113,419	113,419	-	0.00%
48	Subtotal of Water Revenues		$ 6,079,178	$ 10,370,936	$ 4,291,758	70.60%

Arizona American - Sun City Water Company
Test Year Ended December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Schedule A-1
Page 2
Witness: Bourassa

Line No.						
1	Revenue Annualization					
2	5/8 Inch	Residential	$ 10,636	$ 18,306	$ 7,669	72.11%
3	1 Inch	Residential	404	695	291	71.93%
4	1.5 Inch	Residential	1,046	1,797	751	71.85%
5	2 Inch	Residential	5,905	10,148	4,244	71.87%
6	5/8 Inch	Commercial	421	724	303	72.10%
7	3/4 Inch	Commercial	(70)	(120)	(50)	72.09%
8	1 Inch	Commercial	(343)	(590)	(247)	72.01%
9	1.5 Inch	Commercial	863	1,484	621	71.94%
10	2 Inch	Commercial	5,008	8,605	3,597	71.84%
11	3 Inch	Commercial	(3,159)	(5,429)	(2,270)	71.85%
12	1.5 Inch	Irrigation	(4)	(6)	(3)	72.31%
13	2 Inch	Irrigation	(594)	(1,024)	(429)	72.27%
14	3 Inch	Irrigation	(97)	(167)	(70)	72.09%
15	6 Inch	Irrigation	83,116	143,212	60,096	72.30%
16	3 Inch	Public Interruptible	(3,193)	(5,491)	(2,299)	72.00%
17	4 Inch	Fire Protection	126	217	91	72.00%
18	6 Inch	Fire Protection	200	344	144	72.00%
19	8 Inch	Fire Protection	(80)	(138)	(58)	72.00%
20	Total Water Annualization		$ 100,185	$ 172,568	$ 72,382	72.25%
21	Total Water Revenues with Annualization		$ 6,179,363	$ 10,543,503	$ 4,364,140	70.62%
22						
23						
24						
25						
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44						
45	SUPPORTING SCHEDULES:					
46	Rebuttal B-1					
47	Rebuttal C-1					
48	Rebuttal D-1					
49	Rebuttal H-1					
50						

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Summary of Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	RCND Rate base	Fair Value Rate base (RCND Only)
1				
2	Gross Utility Plant in Service	$ 38,754,465	$ 81,489,402	$ 81,489,402
3	Less: Accumulated Depreciation	13,280,503	29,936,694	29,936,694
4				
5	Net Utility Plant in Service	$ 25,473,962	$ 51,552,708	$ 51,552,708
6				
7	Less:			
8	Advances in Aid of			
9	Construction	2,331,186	4,901,808	4,901,808
10	Contributions in Aid of			
11	Construction - Net of amortization	1,127,078	2,369,919	2,369,919
12	Customer Meter Deposits	1,225	1,225	1,225
13	Deferred Income Taxes & Credits	-	-	-
14	Investment tax Credits	-	-	-
15	Plus:			
16	Unamortized Finance			
17	Charges	-	-	-
18	Deferred Tax Assets	-	-	-
19	Allowance for Working Capital	-	-	-
20	Citizens Acquisition Adjustment	9,671,646	-	-
21				
22	Total Rate Base	$ 31,686,119	$ 44,279,756	$ 44,279,756
23				
24				
25				
26	SUPPORTING SCHEDULES:		RECAP SCHEDULES:	
27	Rebuttal B-2		Rebuttal A-1	
28	Rebuttal B-3			
29				
30				
31				

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 39,396,793	(1)	(642,328)	$ 38,754,465
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	13,717,002	(2)	(436,499)	13,280,503
8					
9	Net Utility Plant				
10	in Service	$ 25,679,791			$ 25,473,962
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Onl	2,331,186			2,331,186
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	1,127,078			1,127,078
18	Purposes Only)				
19	Customer Meter Deposits	1,225			1,225
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Unamortized Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	9,746,553	(3)	(74,907)	9,671,646
28					
29	Total	$ 31,966,856			$ 31,686,119
30					
31					
32	(1) See Rebuttal B-2, Page 2				
33	(2) See Rebuttal B-2, Page 3				
34	(3) See Rebuttal B-2, Page 4				
35					
36					
37					
38					
39					
40					
41					
42					

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2
Witness: Bourassa

Line No.	ccount No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 471	$ -	$ 471	$ -	$ -	$ -
3	302.00	Franchises	2,851	-	2,851	-	-	-
4	303.00	Miscellaneous Intangibles	4,591	-	4,591	-	-	-
5		**Subtotal Intangible**	$ 7,913	$ -	$ 7,913	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 180,083	$ -	$ 180,083	$ -	$ -	$ -
9	311.00	Structures and Improvements	682,896	192,348	875,244	335,530	-	335,530
10	312.00	Collecting and Impounding Res.	314	-	314	52	-	52
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	2,533,035	(641,491)	1,891,544	873,887	(389,255)	484,632
13		**Subtotal Source of Supply**	$ 3,396,328	$ (449,143)	$ 2,947,185	$ 1,209,469	$ (389,255)	$ 820,215
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 8,456	$ -	$ 8,456	$ -	$ -	$ -
17	321.00	Structures and Improvements	582,491	-	582,491	248,302	-	248,302
18	323.00	Other Power Production	9,554	-	9,554	2,246	-	2,246
19	325.00	Electric Pumping Equipment	6,943,367	(274,572)	6,668,795	3,811,525	(61,567)	3,749,958
20	326.00	Diesel Pumping Equipment	25,151	-	25,151	6,379	-	6,379
21	328.10	Gas Engine Pumping Equipment	249,781	-	249,781	136,241	-	136,241
22		**Subtotal Pumping**	$ 7,818,799	$ (274,572)	$ 7,544,228	$ 4,204,693	$ (61,567)	$ 4,143,126
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
26	331.00	Structures and Improvements	80,580	-	80,580	11,989	-	11,989
27	332.00	Water Treatment Equipment	407,427	(14,236)	393,191	145,994	(5,489)	140,505
28		**Subtotal Water Treatment**	$ 488,007	$ (14,236)	$ 473,771	$ 157,984	$ (5,489)	$ 152,495
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ 10,493	$ -	$ 10,493	$ -	$ -	$ -
32	341.00	Structures and Improvements	28,604	-	28,604	654	-	654
33	342.00	Distribution, Reservoirs, & ST	1,819,148	(306,637)	1,512,510	538,875	(79,535)	459,340
34	343.00	Transmission and Distribution	13,940,066	94,037	14,034,103	3,373,284	-	3,373,284
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	4,783,796	-	4,783,796	2,239,686	-	2,239,686
37	346.00	Meters	3,232,044	-	3,232,044	912,761	-	912,761
38	348.00	Hydrants	1,797,909	16,772	1,814,681	676,068	-	676,068
39	349.00	Other Transmission & Distribution	523	-	523	241	-	241
40		**Subtotal Transmission and Distribution**	$ 25,612,583	$ (195,828)	$ 25,416,754	$ 7,741,568	$ (79,535)	$ 7,662,033
41								
42		**General**						
43	389.00	Land and Land Rights	$ 1,163	$ -	$ 1,163	$ -	$ -	$ -
44	390.00	Structures and Improvements	798,274	-	798,274	84,875	-	84,875
45	391.00	Office Funiture and Equipment	407,688	94,703	502,391	99,794	-	99,794
46	391.10	Computer Equipment	372,221	(144,900)	227,321	(129,373)	(8,779)	(138,153)
47	392.00	Transportation Equipment	605,009	(25,663)	579,346	348,216	-	348,216
48	393.00	Stores Equipment	6,848	-	6,848	2,120	-	2,120
49	394.00	Tools, Shop and Garage	121,574	(23,600)	97,974	8,830	-	8,830
50	395.00	Laboratory Equipment	33,835	(2,800)	31,035	4,648	-	4,648
51	396.00	Power Operated Equipment	30,379	(1,859)	28,520	12,240	(88)	12,152
52	397.00	Communication Equipment	229,443	(51,644)	177,800	90,675	-	90,675
53	398.00	Miscellaneous Equipment	66,047	(3,608)	62,439	32,476	(3,608)	28,868
54		**Subtotal General**	$ 2,672,482	$ (159,371)	$ 2,513,111	$ 554,500	$ (12,475)	$ 542,025
55								
56								
57		Youngtown Plant *	(148,497)	-	(148,497)	(39,391)	-	(39,391)
58		ADFUC adjustment 3/95 **	(450,822)	450,822	-	(111,822)	111,822	(0)
59		TOTAL WATER PLANT	$ 39,396,793	$ (642,328)	$ 38,754,465	$ 13,717,002	$ (436,499)	$ 13,280,503
60								
61								
62		SUPPORTING SCHEDULES:						
63		Rebuttal B-2, page 2a, 2b, 3a, 3b						
64								
65								

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2a
Witness: Bourassa

Line No.	ccount No.	Description	Direct Original Cost	Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Mispost Adjustment 3	Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 471					-
3	302.00	Franchises	2,851					-
4	303.00	Miscellaneous Intangibles	4,591					-
5		**Subtotal Intangible**	$ 7,913	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 180,083					-
9	311.00	Structures and Improvements	682,896					192,348
10	312.00	Collecting and Impounding Res.	314					-
11	313.00	Lakes, Rivers, Other Intakes	-					-
12	314.00	Wells and Springs	2,533,035	(407,025)			(88,746)	(145,720)
13		**Subtotal Source of Supply**	$ 3,396,328	$ (407,025)	$ -	$ -	$ (88,746)	$ 46,628
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 8,456					-
17	321.00	Structures and Improvements	582,491					-
18	323.00	Other Power Production	9,554					-
19	325.00	Electric Pumping Equipment	6,943,367	(31,714)		(171,390)		(71,468)
20	326.00	Diesel Pumping Equipment	25,151					-
21	328.10	Gas Engine Pumping Equipment	249,781					-
22		**Subtotal Pumping**	$ 7,818,799	$ (31,714)	$ -	$ (171,390)	$ -	$ (71,468)
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					-
26	331.00	Structures and Improvements	80,580					-
27	332.00	Water Treatment Equipment	407,427	(19,594)				5,357
28		**Subtotal Water Treatment**	$ 488,007	$ (19,594)	$ -	$ -	$ -	$ 5,357
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ 10,493					-
32	341.00	Structures and Improvements	28,604					-
33	342.00	Distribution, Reservoirs, & ST	1,819,148	(319,215)				12,578
34	343.00	Transmission and Distribution	13,940,066					94,037
35	344.00	Fire Mains	-					-
36	345.00	Services	4,783,796					-
37	346.00	Meters	3,232,044					-
38	348.00	Hydrants	1,797,909					16,772
39	349.00	Other Transmission & Distribution	523					-
40		**Subtotal Transmission and Distributio**	$ 25,612,583	$ (319,215)	$ -	$ -	$ -	$ 123,387
41								
42		**General**						
43	389.00	Land and Land Rights	$ 1,163					-
44	390.00	Structures and Improvements	798,274					-
45	391.00	Office Funiture and Equipment	407,688					94,703
46	391.10	Computer Equipment	372,221					-
47	392.00	Transportation Equipment	605,009					(25,663)
48	393.00	Stores Equipment	6,848					-
49	394.00	Tools, Shop and Garage	121,574					(23,600)
50	395.00	Laboratory Equipment	33,835					(2,800)
51	396.00	Power Operated Equipment	30,379					(1,700)
52	397.00	Communication Equipment	229,443					(51,644)
53	398.00	Miscellaneous Equipment	66,047					-
54		**Subtotal General**	$ 2,672,482	$ -	$ -	$ -	$ -	$ (10,704)
55								
56								
57		Youngtown Plant *	(148,497)					
58		ADFUC adjustment 3/95 **	(450,822)					
59		TOTAL WATER PLANT	$ 39,396,793	$ (777,547)	$ -	$ (171,390)	$ (88,746)	$ 93,200
60								
61								
62								
63								
64								
65								
66								
67								

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decision	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2b
Witness: Bourassa

Line No.	ccount No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Original Cost
1		**Intangible**							
2	301.00	Organization						$ -	$ 471
3	302.00	Franchises						-	2,851
4	303.00	Miscellaneous Intangibles						-	4,591
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,913
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights						$ -	$ 180,083
9	311.00	Structures and Improvements						192,348	875,244
10	312.00	Collecting and Impounding Res.						-	314
11	313.00	Lakes, Rivers, Other Intakes						-	-
12	314.00	Wells and Springs						(641,491)	1,891,544
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ -	$ -	$ (449,143)	$ 2,947,185
14									
15		**Pumping**							
16	320.00	Land and Land Rights						$ -	$ 8,456
17	321.00	Structures and Improvements						-	582,491
18	323.00	Other Power Production						-	9,554
19	325.00	Electric Pumping Equipment						(274,572)	6,668,795
20	326.00	Diesel Pumping Equipment						-	25,151
21	328.10	Gas Engine Pumping Equipment						-	249,781
22		**Subtotal Pumping**	$ -	$ -	$ -	$ -	$ -	$ (274,572)	$ 7,544,228
23									
24		**Water Treatment**						$ -	
25	330.00	Land and Land Rights						-	$ -
26	331.00	Structures and Improvements						-	80,580
27	332.00	Water Treatment Equipment						(14,236)	393,191
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ -	$ -	$ (14,236)	$ 473,771
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights						$ -	$ 10,493
32	341.00	Structures and Improvements						-	28,604
33	342.00	Distribution, Reservoirs, & ST						(306,637)	1,512,510
34	343.00	Transmission and Distribution						94,037	14,034,103
35	344.00	Fire Mains						-	-
36	345.00	Services						-	4,783,796
37	346.00	Meters						-	3,232,044
38	348.00	Hydrants						16,772	1,814,681
39	349.00	Other Transmission & Distribution						-	523
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ -	$ -	$ (195,828)	$ 25,416,754
41									
42		**General**							
43	389.00	Land and Land Rights			-			$ -	$ 1,163
44	390.00	Structures and Improvements			-			-	798,274
45	391.00	Office Funiture and Equipment			-			94,703	502,391
46	391.10	Computer Equipment			(144,900)			(144,900)	227,321
47	392.00	Transportation Equipment			-			(25,663)	579,346
48	393.00	Stores Equipment			-			-	6,848
49	394.00	Tools, Shop and Garage			-			(23,600)	97,974
50	395.00	Laboratory Equipment			-			(2,800)	31,035
51	396.00	Power Operated Equipment			(159)			(1,859)	28,520
52	397.00	Communication Equipment			-			(51,644)	177,800
53	398.00	Miscellaneous Equipment			(3,608)			(3,608)	62,439
54		**Subtotal General**	$ -	$ -	$ (148,667)	$ -	$ -	$ (159,371)	$ 2,513,111
55									
56									
57		Youngtown Plant *						-	(148,497)
58		ADFUC adjustment 3/95 **	450,822					450,822	-
59		TOTAL WATER PLANT	$ 450,822	$ -	$ (148,667)	$ -	$ -	$ (642,328)	$ 38,754,465
60									
61									
62									
63									
64									
65									
66									
67									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Mispost Adjustment 3	Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -	-	-			
3	302.00	Franchises	-	-	-			
4	303.00	Miscellaneous Intangibles	-	-	-			
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ -	-	-			
9	311.00	Structures and Improvements	335,530	-	-			
10	312.00	Collecting and Impounding Res.	52	-	-			
11	313.00	Lakes, Rivers, Other Intakes	-	-	-			
12	314.00	Wells and Springs	873,887	(389,255)	-			
13		**Subtotal Source of Supply**	$ 1,209,469	$ (389,255)	$ -	$ -	$ -	$ -
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ -	-	-			
17	321.00	Structures and Improvements	248,302	-	-			
18	323.00	Other Power Production	2,246	-	-			
19	325.00	Electric Pumping Equipment	3,811,525	(17,018)	-	(44,549)		
20	326.00	Diesel Pumping Equipment	6,379	-	-			
21	328.10	Gas Engine Pumping Equipment	136,241	-	-			
22		**Subtotal Pumping**	$ 4,204,693	$ (17,018)	$ -	$ (44,549)	$ -	$ -
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	-	-			
26	331.00	Structures and Improvements	11,989	-	-			
27	332.00	Water Treatment Equipment	145,994	(5,489)	-			
28		**Subtotal Water Treatment**	$ 157,984	$ (5,489)	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -	-	-			
32	341.00	Structures and Improvements	654	-	-			
33	342.00	Distribution, Reservoirs, & ST	538,875	(79,535)	-			
34	343.00	Transmission and Distribution	3,373,284	-	-			
35	344.00	Fire Mains	-	-	-			
36	345.00	Services	2,239,686	-	-			
37	346.00	Meters	912,761	-	-			
38	348.00	Hydrants	676,068	-	-			
39	349.00	Other Transmission & Distribution	241	-	-			
40		**Subtotal Transmission and Distributio**	$ 7,741,568	$ (79,535)	$ -	$ -	$ -	$ -
41								
42		**General**						
43	389.00	Land and Land Rights	$ -	-	-			
44	390.00	Structures and Improvements	84,875	-	-			
45	391.00	Office Funiture and Equipment	99,794	-	-			
46	391.10	Computer Equipment	(129,373)	-	-			
47	392.00	Transportation Equipment	348,216	-	-			
48	393.00	Stores Equipment	2,120	-	-			
49	394.00	Tools, Shop and Garage	8,830	-	-			
50	395.00	Laboratory Equipment	4,648	-	-			
51	396.00	Power Operated Equipment	12,240	-	-			
52	397.00	Communication Equipment	90,675	-	-			
53	398.00	Miscellaneous Equipment	32,476	-	-			
54		**Subtotal General**	$ 554,500	$ -	$ -	$ -	$ -	$ -
55								
56								
57		Youngtown Plant *	(39,391)	-	-			
58		ADFUC adjustment 3/95 **	(111,822)	-	-			
59		TOTAL WATER PLANT	$ 13,717,002	$ (491,296)	$ -	$ (44,549)	$ -	$ -
60								
61								
62								
63								
64								
65								
66								
67								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Schedule B-2, Page 8
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decisi	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3b
Witness: Bourassa

Line No.	ccount No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization						$ -	$ -
3	302.00	Franchises						-	-
4	303.00	Miscellaneous Intangibles						-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights						$ -	$ -
9	311.00	Structures and Improvements						-	335,530
10	312.00	Collecting and Impounding Res.						-	52
11	313.00	Lakes, Rivers, Other Intakes						-	-
12	314.00	Wells and Springs						(389,255)	484,632
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ -	$ -	$ (389,255)	$ 820,215
14									
15		**Pumping**							
16	320.00	Land and Land Rights						$ -	$ -
17	321.00	Structures and Improvements						-	248,302
18	323.00	Other Power Production						-	2,246
19	325.00	Electric Pumping Equipment						(61,567)	3,749,958
20	326.00	Diesel Pumping Equipment						-	6,379
21	328.10	Gas Engine Pumping Equipment						-	136,241
22		**Subtotal Pumping**	$ -	$ -	$ -	$ -	$ -	$ (61,567)	$ 4,143,126
23									
24		**Water Treatment**							
25	330.00	Land and Land Rights						$ -	$ -
26	331.00	Structures and Improvements						-	11,989
27	332.00	Water Treatment Equipment						(5,489)	140,505
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ -	$ -	$ (5,489)	$ 152,495
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights						$ -	$ -
32	341.00	Structures and Improvements						-	654
33	342.00	Distribution, Reservoirs, & ST						(79,535)	459,340
34	343.00	Transmission and Distribution						-	3,373,284
35	344.00	Fire Mains						-	-
36	345.00	Services						-	2,239,686
37	346.00	Meters						-	912,761
38	348.00	Hydrants						-	676,068
39	349.00	Other Transmission & Distribution						-	241
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ -	$ -	$ (79,535)	$ 7,662,033
41									
42		**General**							
43	389.00	Land and Land Rights			-			$ -	$ -
44	390.00	Structures and Improvements			-			-	84,875
45	391.00	Office Funiture and Equipment			-			-	99,794
46	391.10	Computer Equipment			(8,779)			(8,779)	(138,153)
47	392.00	Transportation Equipment			-			-	348,216
48	393.00	Stores Equipment			-			-	2,120
49	394.00	Tools, Shop and Garage			-			-	8,830
50	395.00	Laboratory Equipment			-			-	4,648
51	396.00	Power Operated Equipment			(88)			(88)	12,152
52	397.00	Communication Equipment			-			-	90,675
53	398.00	Miscellaneous Equipment			(3,608)			(3,608)	28,868
54		**Subtotal General**	$ -	$ -	$ (12,475)	$ -	$ -	$ (12,475)	$ 542,025
55									
56									
57		Youngtown Plant *						-	(39,391)
58		ADFUC adjustment 3/95 **	111,822					111,822	(0)
59		TOTAL WATER PLANT	$ 111,822	$ -	$ (12,475)	$ -	$ -	$ (436,499)	$ 13,280,503
60									
61									
62									
63									
64									
65									
66									
67									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American - Sun City Water
Common Plant Allocation
at December 31, 2002

Exhibit
Schedule B-2
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Original Cost	Rebuttal Allocated Original Cost	Rebuttal Allocated Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.23835	$ 1,163	$ 1,163	$ -	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.23835	798,274	798,274	-	74,118	74,118	-
5	391.00	Office Funiture and Equipment	0.23835	237,788	237,788	-	85,925	85,925	-
6	391.10	Computer Equipment	0.23835	340,444	195,544	(144,900)	(103,610)	(112,390)	(8,779)
7	392.00	Transportation Equipment	0.23835	428,409	428,409	-	247,444	247,444	-
8	393.00	Stores Equipment	0.23835	6,847	6,847	-	1,855	1,855	-
9	394.00	Tools, Shop and Garage	0.23835	97,973	97,973	-	4,347	4,347	-
10	395.00	Laboratory Equipment	0.23835	31,035	31,035	-	5,471	5,471	-
11	396.00	Power Operated Equipment	0.23835	28,679	28,520	(159)	10,204	10,117	(88)
12	397.00	Communication Equipment	0.23835	137,643	137,643	-	79,275	79,275	-
13	398.00	Miscellaneous Equipment	0.23835	66,047	62,439	(3,608)	30,617	27,009	(3,608)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 2,174,303	$ 2,025,636	$ (148,667)	$ 435,645	$ 423,170	$ (12,475)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-2, Page 5								
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1								
2	389.00		0 $ 4,880	$ -	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements	3,349,189	-	3,349,189	310,963	-	310,963
4	391.00	Office Funiture and Equipment	997,650	-	997,650	360,503	-	360,503
5	391.10	Computer Equipment	1,428,345	(607,932)	820,413	(434,702)	(36,834)	(471,536)
6	392.00	Transportation Equipment	1,797,409	-	1,797,409	1,038,162	-	1,038,162
7	393.00	Stores Equipment	28,727	-	28,727	7,782	-	7,782
8	394.00	Tools, Shop and Garage	411,051	-	411,051	18,237	-	18,237
9	395.00	Laboratory Equipment	130,207	-	130,207	22,954	-	22,954
10	396.00	Power Operated Equipment	120,325	(669)	119,656	42,813	(368)	42,444
11	397.00	Communication Equipment	577,488	-	577,488	332,600	-	332,600
12	398.00	Miscellaneous Equipment	277,101	(15,137)	261,964	128,455	(15,137)	113,318
13								
14								
15		TOTALCOMMON PLANT	$ 9,122,373	$ (623,738)	$ 8,498,635	$ 1,827,766	$ (52,339)	$ 1,775,427
16								
17			SUPPORTING SCHEDULES					
18			Rebuttal Schedule B-2, Page 6a, 6b, 7a, 7b					
19								
20								

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880						
3	390.00	Structures and Improvements	3,349,189						
4	391.00	Office Funiture and Equipment	997,650						
5	391.10	Computer Equipment	1,428,345		(607,932)				
6	392.00	Transportation Equipment	1,797,409						
7	393.00	Stores Equipment	28,727						
8	394.00	Tools, Shop and Garage	411,051						
9	395.00	Laboratory Equipment	130,207						
10	396.00	Power Operated Equipment	120,325		(669)				
11	397.00	Communication Equipment	577,488						
12	398.00	Miscellaneous Equipment	277,101	(458)		(14,679)			
13		**Subtotal General**	$ 9,122,373	$ (458)	$ (608,601)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
2	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
3	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights							$ -	$ 4,880
3	390.00	Structures and Improvements							-	3,349,189
4	391.00	Office Funiture and Equipment							-	997,650
5	391.10	Computer Equipment							(607,932)	820,413
6	392.00	Transportation Equipment							-	1,797,409
7	393.00	Stores Equipment							-	28,727
8	394.00	Tools, Shop and Garage							-	411,051
9	395.00	Laboratory Equipment							-	130,207
10	396.00	Power Operated Equipment							(669)	119,656
11	397.00	Communication Equipment							-	577,488
12	398.00	Miscellaneous Equipment							(15,137)	261,964
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (623,738)	$ 8,498,635
14										

ADJ #	Reference
6	
7	
8	
9	
10	

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7a
Witness: Bour

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -						
3	390.00	Structures and Improvements	310,963						
4	391.00	Office Funiture and Equipment	360,503						
5	391.10	Computer Equipment	(434,702)		(36,834)				
6	392.00	Transportation Equipment	1,038,162						
7	393.00	Stores Equipment	7,782						
8	394.00	Tools, Shop and Garage	18,237						
9	395.00	Laboratory Equipment	22,954						
10	396.00	Power Operated Equipment	42,813		(368)				
11	397.00	Communication Equipment	332,600						
12	398.00	Miscellaneous Equipment	128,455	(458)		(14,679)			
13		**Subtotal General**	$ 1,827,766	$ (458)	$ (37,202)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights							$ -	$ -
3	390.00	Structures and Improvements							-	310,963
4	391.00	Office Funiture and Equipment							-	360,503
5	391.10	Computer Equipment							(36,834)	(471,536)
6	392.00	Transportation Equipment							-	1,038,162
7	393.00	Stores Equipment							-	7,782
8	394.00	Tools, Shop and Garage							-	18,237
9	395.00	Laboratory Equipment							-	22,954
10	396.00	Power Operated Equipment							(368)	42,444
11	397.00	Communication Equipment							-	332,600
12	398.00	Miscellaneous Equipment							(15,137)	113,318
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (52,339)	$ 1,775,427
14										
15			ADJ #			Reference				
16			6							
17			7							
18			8							
19			9							
20			10							
21										
22										
23										

Arizona-American Sun City Water
Plant Not Used and Useful

Exhibit
Rebuttal Schedule B-2
Page 8

Asset Id	Asset Desc.	Class	Acq. Date	Original Cost	A/D	RCN	Adjust O.C.	Adjust A/D	Adjust RCND	Adj.RCN A/D
1673884	Well	W31400	19710701	13,810	(10,242)	57,712	(13,810)	(13,810)	(57,712)	(57,712)
1673898	Well	W31400	19720701	21,201	(15,209)	80,003	(21,201)	(21,201)	(80,003)	(80,003)
1673908	Well	W31400	19730701	290,901	(201,565)	1,001,050	(290,901)	(290,901)	(1,001,050)	(1,001,050)
1674256	CASING EACH	W31400	19780701	5,357	(3,063)	12,054	(5,357)	(5,357)	(12,054)	(12,054)
1674257	WELL EACH	W31400	19780701	21,259	(12,157)	47,836	(21,259)	(21,259)	(47,836)	(47,836)
1674885	WELL EACH	W31400	19881001	25,937	(8,541)	37,004	(25,937)	(25,937)	(37,004)	(37,004)
1674662	WELL	W31400	19950715	17,565	(6,636)	20,971	(17,565)	(6,636)	(20,971)	(7,923)
1674663	WELL	W31400	19950715	10,995	(4,154)	13,127	(10,995)	(4,154)	(13,127)	(4,959)
				407,025	(261,566)	1,269,757	(407,025)	(389,255)	(1,269,757)	(1,248,541)
1674266	BOOSTER PUMP	W32500	19950715	4,014	(3,426)	4,793	(4,014)	(3,426)	(4,793)	(4,091)
1674782	VALVE	W32500	19950715	1,643	(917)	1,961	(1,643)	(917)	(1,961)	(1,095)
1674783	MOTOR 200 HP	W32500	19950715	2,236	(1,248)	2,669	(2,236)	(1,248)	(2,669)	(1,490)
1674899	STARTER MOTOR	W32500	19950715	395	(210)	472	(395)	(210)	(472)	(251)
1674911	BOOSTER PUMP	W32500	19950715	2,920	(1,530)	3,486	(2,920)	(1,530)	(3,486)	(1,827)
1674912	BOOSTER PUMP	W32500	19950715	2,500	(1,302)	2,984	(2,500)	(1,302)	(2,984)	(1,554)
1674913	BOOSTER PUMP	W32500	19950715	3,168	(1,650)	3,782	(3,168)	(1,650)	(3,782)	(1,970)
1675023	BOOSTER PUMP	W32500	19950715	1,026	(496)	1,225	(1,026)	(496)	(1,225)	(592)
1675025	VALVE	W32500	19950715	4,573	(2,222)	5,460	(4,573)	(2,222)	(5,460)	(2,652)
1675026	VALVE	W32500	19950715	1,375	(665)	1,641	(1,375)	(665)	(1,641)	(794)
1675205	VALVE	W32500	19950715	1,248	(557)	1,490	(1,248)	(557)	(1,490)	(665)
1675713	BOOSTER PUMP	W32500	19950715	1,671	(559)	1,995	(1,671)	(559)	(1,995)	(667)
1675714	BOOSTER PUMP	W32500	19950715	2,595	(868)	3,098	(2,595)	(868)	(3,098)	(1,036)
1675024	BOOSTER PUMP	W32500	19950715	1,904	(921)	2,273	(1,904)	(921)	(2,273)	(1,099)
1674896	GAUGE EACH	W32500	19880101	448.23	-238.34	655.49	(448)	(448)	(655)	(655)
				31,714	(16,808)	37,983	(31,714)	(17,018)	(37,983)	(20,438)
1675214	DESANDER	W33200	19950715	2,450	(835)	2,925	(2,450)	(835)	(2,925)	(997)
1675215	DESANDER	W33200	19950715	11,662	(3,961)	13,923	(11,662)	(3,961)	(13,923)	(4,729)
1676937	WEIGHING EQUIPT	W33200	19981015	2,166	(274)	2,436	(2,166)	(274)	(2,436)	(308)
1676939	WEIGHING EQUIPT	W33200	19981015	1,742	(220)	1,960	(1,742)	(220)	(1,960)	(248)
1676940	WEIGHING EQUIPT	W33200	19981015	1,574	(199)	1,771	(1,574)	(199)	(1,771)	(224)
				19,594	(5,489)	23,015	(19,594)	(5,489)	(23,015)	(6,506)
1674459	500000 GAL STEEL	W34200	19950715	152,316	(47,711)	181,850	(152,316)	(47,711)	(181,850)	(56,962)
1674785	2000 G HYDROPNE	W34200	19950715	15,045	(3,509)	17,962	(15,045)	(3,509)	(17,962)	(4,190)
1674932	OVERFLOW PIPE	W34200	19950715	5,475	(1,190)	6,537	(5,475)	(1,190)	(6,537)	(1,420)
1675220	TANK	W34200	19950715	145,645	(26,989)	173,886	(145,645)	(26,989)	(173,886)	(32,222)
1675222	2000 G HYDROPNE	W34200	19950715	734	(136)	876	(734)	(136)	(876)	(162)
				319,215	(79,535)	381,111	(319,215)	(79,535)	(381,111)	(94,957)
3046186		W39110	19991031	72,580	(5,084)	80,113	(72,580)	(5,084)	(80,113)	(5,611)
3046187		W39110	19991031	4,381	(307)	4,836	(4,381)	(307)	(4,836)	(339)
3046188		W39110	19991031	12,077	(846)	13,330	(12,077)	(846)	(13,330)	(934)
3046189		W39110	19991031	14,149	(985)	15,618	(14,149)	(985)	(15,618)	(1,087)
3046190		W39110	19991031	130,655	(9,145)	144,217	(130,655)	(9,145)	(144,217)	(10,095)
3046191	Banner mods and	W39110	19991031	32,027	(2,243)	35,352	(32,027)	(2,243)	(35,352)	(2,476)
3046192	S/W & Consultant	W39110	19991031	326,134	(22,826)	359,987	(326,134)	(22,826)	(359,987)	(25,196)
3057430	Invoice # 58029	W39110	19991231	1,322	452	1,459	(1,322)	452	(1,459)	499
3057431		W39110	19991231	727	248	802	(727)	248	(802)	274
3057433	Invoice # 57874	W39110	19991231	178	61	197	(178)	61	(197)	67
3058309		W39110	19991231	6,352	2,170	7,011	(6,352)	2,170	(7,011)	2,395
3058310		W39110	19991231	4,910	1,677	5,419	(4,910)	1,677	(5,419)	1,851
3139716	Laptop, Dell C61	W39110	20011231	2,440	(5)	2,440	(2,440)	(5)	(2,440)	(5)
				607,932	(36,834)	670,782	(607,932)	(36,834)	(670,782)	(40,657)
1675121	TRASH PUMP	W39600	19950715	669	(368)	799	(669)	(368)	(799)	(440)

Arizona American - Sun City Water
Test Year Ended December 31, 2001
RCND Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-3
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 87,395,276	(1)	(5,905,874)	$ 81,489,402
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	31,018,998	(2)	(1,082,304)	29,936,694
8					
9	Net Utility Plant				
10	in Service	$ 56,376,278			$ 51,552,708
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only	5,171,351	(3)	(269,543)	4,901,808
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	2,500,237	(4)	(130,318)	2,369,919
18	Purposes Only)				
19	Customer Meter Deposits	1,225			1,225
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Unamortized Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	-			-
28					
29	Total	$ 48,703,466			$ 44,279,756
30					
31					
32	(1) See B-3, Page 2				
33	(2) See B-3, Page 3				
34	(3) Adjust AIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
35	(4) Adjust CIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
36					
37					
38					
39					
40					

Arizona American - Sun City Water
RCND Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2
Witness: Bourassa

Lin No.	Account No.	Description	Direct Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 471	$ -	$ 471	$ -	$ -	$ -
3	302.00	Franchises	7,100	(4,249)	2,851	-	-	-
4	303.00	Miscellaneous Intangibles	12,986	(8,395)	4,591	-	-	-
5		**Subtotal Intangible**	$ 20,557	$ (12,644)	$ 7,913	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 462,571	$ (282,489)	$ 180,083	$ -	$ -	$ -
9	311.00	Structures and Improvements	1,600,238	127,771	1,728,009	789,160	(31,934)	757,227
10	312.00	Collecting and Impounding Res.	371	(27)	344	61	(4)	57
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	5,294,542	(1,748,298)	3,546,244	1,849,967	(967,688)	882,280
13		**Subtotal Source of Supply**	$ 7,357,722	$ (1,903,042)	$ 5,454,680	$ 2,639,189	$ (999,625)	$ 1,639,563
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 19,028	$ (10,572)	$ 8,456	$ -	$ -	$ -
17	321.00	Structures and Improvements	1,498,347	(50,275)	1,448,072	631,067	(21,012)	610,055
18	323.00	Other Power Production	11,219	(109)	11,109	2,601	(23)	2,577
19	325.00	Electric Pumping Equipment	13,870,177	3,465,362	17,335,539	7,655,201	2,098,904	9,754,104
20	326.00	Diesel Pumping Equipment	29,633	76	29,709	7,404	17	7,421
21	328.10	Gas Engine Pumping Equipment	575,961	118,278	694,239	305,985	61,552	367,538
22		**Subtotal Pumping**	$ 16,004,366	$ 3,522,759	$ 19,527,125	$ 8,602,257	$ 2,139,438	$ 10,741,696
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
26	331.00	Structures and Improvements	112,317	(4,879)	107,438	16,447	(685)	15,761
27	332.00	Water Treatment Equipment	615,391	(38,503)	576,888	216,357	(13,159)	203,198
28		**Subtotal Water Treatment**	$ 727,709	$ (43,382)	$ 684,326	$ 232,804	$ (13,845)	$ 218,959
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ 43,849	$ (33,356)	$ 10,493	$ -	$ -	$ -
32	341.00	Structures and Improvements	28,951	1	28,952	659	0	659
33	342.00	Distribution, Reservoirs, & ST	4,116,541	(869,680)	3,246,861	1,420,628	(224,970)	1,195,657
34	343.00	Transmission and Distribution	33,665,538	(5,968,530)	27,697,008	8,606,899	(1,608,537)	6,998,363
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	12,220,450	(1,946,894)	10,273,556	5,629,215	(887,369)	4,741,846
37	346.00	Meters	6,283,128	(311,082)	5,972,046	1,736,141	(83,950)	1,652,191
38	348.00	Hydrants	4,435,480	1,336,272	5,771,752	1,641,510	482,983	2,124,493
39	349.00	Other Transmission & Distribution	1,073	(195)	878	488	(88)	400
40		**Subtotal Transmission and Distribution**	$ 60,795,010	$ (7,793,464)	$ 53,001,547	$ 19,035,541	$ (2,321,931)	$ 16,713,610
41								
42		**General**						
43	389.00	Land and Land Rights	$ 3,010	$ (1,847)	$ 1,163	$ -	$ -	$ -
44	390.00	Structures and Improvements	1,083,429	(28,289)	1,055,140	131,376	(3,952)	127,425
45	391.00	Office Furniture and Equipment	476,645	94,987	571,632	133,553	2,257	135,811
46	391.10	Computer Equipment	410,452	(163,619)	246,832	(141,018)	(8,461)	(149,479)
47	392.00	Transportation Equipment	650,624	(32,309)	618,315	376,206	(3,992)	372,214
48	393.00	Stores Equipment	8,929	92	9,021	2,875	86	2,961
49	394.00	Tools, Shop and Garage	148,449	(23,808)	124,640	7,845	98	7,943
50	395.00	Laboratory Equipment	38,724	(3,170)	35,553	5,696	(26)	5,670
51	396.00	Power Operated Equipment	38,492	(1,310)	37,182	15,398	101	15,499
52	397.00	Communication Equipment	258,135	(54,162)	203,973	110,439	(699)	109,740
53	398.00	Miscellaneous Equipment	94,021	(6,401)	87,620	48,725	(6,623)	42,103
54		**Subtotal General**	$ 3,210,909	$ (219,837)	$ 2,991,072	$ 691,097	$ (21,210)	$ 669,887
55								
56								
57		Youngtown Plant *	(177,260)	-	(177,260)	(47,020)	-	(47,020)
58		AFUDC adjustment 3/95 **	(543,736)	543,736	(0)	(134,869)	134,869	0
59		TOTAL WATER PLANT	$ 87,395,276	$ (5,905,874)	$ 81,489,402	$ 31,018,998	$ (1,082,304)	$ 29,936,694
60								
61								
62		SUPPORTING SCHEDULES:						
63		Rebuttal B-3, page 2a, 2b, 3a, 3b						
64								
65								

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Mispost Adjustment 3	Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 471					-
3	302.00	Franchises	7,100					-
4	303.00	Miscellaneous Intangibles	12,986					-
5		**Subtotal Intangible**	$ 20,557	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 462,571					-
9	311.00	Structures and Improvements	1,600,238					192,348
10	312.00	Collecting and Impounding Res.	371					-
11	313.00	Lakes, Rivers, Other Intakes	-					-
12	314.00	Wells and Springs	5,294,542	(1,269,757)				(145,720)
13		**Subtotal Source of Supply**	$ 7,357,722	$ (1,269,757)	$ -	$ -	$ -	$ 46,628
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 19,028					-
17	321.00	Structures and Improvements	1,498,347					-
18	323.00	Other Power Production	11,219					-
19	325.00	Electric Pumping Equipment	13,870,177	(37,983)		(206,713)		(71,468)
20	326.00	Diesel Pumping Equipment	29,633					-
21	328.10	Gas Engine Pumping Equipment	575,961					-
22		**Subtotal Pumping**	$ 16,004,366	$ (37,983)	$ -	$ (206,713)	$ -	$ (71,468)
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					-
26	331.00	Structures and Improvements	112,317					-
27	332.00	Water Treatment Equipment	615,391	(23,015)				5,357
28		**Subtotal Water Treatment**	$ 727,709	$ (23,015)	$ -	$ -	$ -	$ 5,357
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ 43,849					-
32	341.00	Structures and Improvements	28,951					-
33	342.00	Distribution, Reservoirs, & ST	4,116,541	(381,111)				12,578
34	343.00	Transmission and Distribution	33,665,538					94,037
35	344.00	Fire Mains	-					-
36	345.00	Services	12,220,450					-
37	346.00	Meters	6,283,128					-
38	348.00	Hydrants	4,435,480					16,772
39	349.00	Other Transmission & Distribution	1,073					-
40		**Subtotal Transmission and Distributio**	$ 60,795,010	$ (381,111)	$ -	$ -	$ -	$ 123,387
41								
42		**General**						
43	389.00	Land and Land Rights	$ 3,010					-
44	390.00	Structures and Improvements	1,083,429					-
45	391.00	Office Funiture and Equipment	476,645					94,703
46	391.10	Computer Equipment	410,452					-
47	392.00	Transportation Equipment	650,624					(25,663)
48	393.00	Stores Equipment	8,929					-
49	394.00	Tools, Shop and Garage	148,449					(23,600)
50	395.00	Laboratory Equipment	38,724					(2,800)
51	396.00	Power Operated Equipment	38,492					(1,700)
52	397.00	Communication Equipment	258,135					(51,644)
53	398.00	Miscellaneous Equipment	94,021					-
54		**Subtotal General**	$ 3,210,909	$ -	$ -	$ -	$ -	$ (10,704)
55								
56								
57		Youngtown Plant *	(177,260)					
58		ADFUC adjustment 3/95 **	(543,736)					
59		TOTAL WATER PLANT	$ 87,395,276	$ (1,711,866)	$ -	$ (206,713)	$ -	$ 93,200
60								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Sched B-3, Page 8
2	Unidentified Plant	Blank
3	Mis-posted Plant	Trended ACC Staff Adj.
4	Plant Removed by Prev. Decisio	Blank
5	Post Test Year Plant	ACC Staff

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Trended Reproduction Cost New
1		**Intangible**							
2	301.00	Organization				-		$ -	$ 471
3	302.00	Franchises				(4,249)		(4,249)	2,851
4	303.00	Miscellaneous Intangibles				(8,395)		(8,395)	4,591
5		**Subtotal Intangible**	$ -	$ -	$ -	$ (12,644)	$ -	$ (12,644)	$ 7,913
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights				(282,489)		$ (282,489)	$ 180,083
9	311.00	Structures and Improvements				(64,577)		127,771	1,728,009
10	312.00	Collecting and Impounding Res.				(27)		(27)	344
11	313.00	Lakes, Rivers, Other Intakes				-		-	-
12	314.00	Wells and Springs				(332,821)		(1,748,298)	3,546,244
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ (679,913)	$ -	$ (1,903,042)	$ 5,454,680
14									
15		**Pumping**							
16	320.00	Land and Land Rights				(10,572)		$ (10,572)	$ 8,456
17	321.00	Structures and Improvements				(50,275)		(50,275)	1,448,072
18	323.00	Other Power Production				(109)		(109)	11,109
19	325.00	Electric Pumping Equipment				3,781,527		3,465,362	17,335,539
20	326.00	Diesel Pumping Equipment				76		76	29,709
21	328.10	Gas Engine Pumping Equipment				118,278		118,278	694,239
22		**Subtotal Pumping**	$ -	$ -	$ -	$ 3,838,924	$ -	$ 3,522,759	$ 19,527,125
23									
24		**Water Treatment**				-		$ -	
25	330.00	Land and Land Rights				-		-	$ -
26	331.00	Structures and Improvements				(4,879)		(4,879)	107,438
27	332.00	Water Treatment Equipment				(20,846)		(38,503)	576,888
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ (25,725)	$ -	$ (43,382)	$ 684,326
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights				(33,356)		$ (33,356)	$ 10,493
32	341.00	Structures and Improvements				1		1	28,952
33	342.00	Distribution, Reservoirs, & ST				(501,147)		(869,680)	3,246,861
34	343.00	Transmission and Distribution				(6,062,567)		(5,968,530)	27,697,008
35	344.00	Fire Mains				-		-	-
36	345.00	Services				(1,946,894)		(1,946,894)	10,273,556
37	346.00	Meters				(311,082)		(311,082)	5,972,046
38	348.00	Hydrants				1,319,500		1,336,272	5,771,752
39	349.00	Other Transmission & Distribution				(195)		(195)	878
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ (7,535,740)	$ -	$ (7,793,464)	$ 53,001,547
41									
42		**General**							
43	389.00	Land and Land Rights			(1,847)			$ (1,847)	$ 1,163
44	390.00	Structures and Improvements			(28,289)			(28,289)	1,055,140
45	391.00	Office Funiture and Equipment			284			94,987	571,632
46	391.10	Computer Equipment			(163,619)			(163,619)	246,832
47	392.00	Transportation Equipment			(6,646)			(32,309)	618,315
48	393.00	Stores Equipment			92			92	9,021
49	394.00	Tools, Shop and Garage			(208)			(23,808)	124,640
50	395.00	Laboratory Equipment			(370)			(3,170)	35,553
51	396.00	Power Operated Equipment			390			(1,310)	37,182
52	397.00	Communication Equipment			(2,518)			(54,162)	203,973
53	398.00	Miscellaneous Equipment			(6,401)			(6,401)	87,620
54		**Subtotal General**	$ -	$ -	$ (209,133)	$ -	$ -	$ (219,837)	$ 2,991,072
55									
56									
57		Youngtown Plant *						-	(177,260)
58		ADFUC adjustment 3/95 **	543,736					543,736	(0)
59		TOTAL WATER PLANT	$ 543,736	$ -	$ (209,133)	$ (4,415,098)	$ -	$ (5,905,874)	$ 81,489,402
60									
61									
62									
63									
64									
65									
66									
67									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Mispost Adjustment 3	Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -	-	-			
3	302.00	Franchises	-	-	-			
4	303.00	Miscellaneous Intangibles	-	-	-			
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ -	-	-			
9	311.00	Structures and Improvements	789,160	-	-			
10	312.00	Collecting and Impounding Res.	61	-	-			
11	313.00	Lakes, Rivers, Other Intakes	-	-	-			
12	314.00	Wells and Springs	1,849,967	(1,248,541)	-			
13		**Subtotal Source of Supply**	$ 2,639,189	$ (1,248,541)	$ -	$ -	$ -	$ -
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ -	-	-			
17	321.00	Structures and Improvements	631,067	-	-			
18	323.00	Other Power Production	2,601	-	-			
19	325.00	Electric Pumping Equipment	7,655,201	(20,438)	-	(91,263)		
20	326.00	Diesel Pumping Equipment	7,404	-	-			
21	328.10	Gas Engine Pumping Equipment	305,985	-	-			
22		**Subtotal Pumping**	$ 8,602,257	$ (20,438)	$ -	$ (91,263)	$ -	$ -
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	-	-			
26	331.00	Structures and Improvements	16,447	-	-			
27	332.00	Water Treatment Equipment	216,357	(6,506)	-			
28		**Subtotal Water Treatment**	$ 232,804	$ (6,506)	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -	-	-			
32	341.00	Structures and Improvements	659	-	-			
33	342.00	Distribution, Reservoirs, & ST	1,420,628	(94,957)	-			
34	343.00	Transmission and Distribution	8,606,899	-	-			
35	344.00	Fire Mains	-	-	-			
36	345.00	Services	5,629,215	-	-			
37	346.00	Meters	1,736,141	-	-			
38	348.00	Hydrants	1,641,510	-	-			
39	349.00	Other Transmission & Distribution	488	-	-			
40		**Subtotal Transmission and Distributio**	$ 19,035,541	$ (94,957)	$ -	$ -	$ -	$ -
41								
42		**General**						
43	389.00	Land and Land Rights	$ -	-	-			
44	390.00	Structures and Improvements	131,376	-	-			
45	391.00	Office Funiture and Equipment	133,553	-	-			
46	391.10	Computer Equipment	(141,018)	-	-			
47	392.00	Transportation Equipment	376,206	-	-			
48	393.00	Stores Equipment	2,875	-	-			
49	394.00	Tools, Shop and Garage	7,845	-	-			
50	395.00	Laboratory Equipment	5,696	-	-			
51	396.00	Power Operated Equipment	15,398	-	-			
52	397.00	Communication Equipment	110,439	-	-			
53	398.00	Miscellaneous Equipment	48,725	-	-			
54		**Subtotal General**	$ 691,097	$ -	$ -	$ -	$ -	$ -
55								
56								
57		Youngtown Plant *	(47,020)	-	-			
58		ADFUC adjustment 3/95 **	(134,869)	-	-			
59		TOTAL WATER PLANT	$ 31,018,998	$ (1,370,441)	$ -	$ (91,263)	$ -	$ -
60								
61								
62								
63								
64								
65								
66								
67								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Sched B-3, Page 8
2	Unidentified Plant	Blank
3	Mis-posted Plant	Trended ACC Staff Adj.
4	Plant Removed by Prev. Decisi	Blank
5	Post Test Year Plant	ACC Staff

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plan Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization				-		$ -	$ -
3	302.00	Franchises				-		-	-
4	303.00	Miscellaneous Intangibles				-		-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights				-		$ -	$ -
9	311.00	Structures and Improvements				(31,934)		(31,934)	757,227
10	312.00	Collecting and Impounding Res.				(4)		(4)	57
11	313.00	Lakes, Rivers, Other Intakes				-		-	-
12	314.00	Wells and Springs				280,853		(967,688)	882,280
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ 248,916	$ -	$ (999,625)	$ 1,639,563
14									
15		**Pumping**							
16	320.00	Land and Land Rights				-		$ -	$ -
17	321.00	Structures and Improvements				(21,012)		(21,012)	610,055
18	323.00	Other Power Production				(23)		(23)	2,577
19	325.00	Electric Pumping Equipment				2,210,605		2,098,904	9,754,104
20	326.00	Diesel Pumping Equipment				17		17	7,421
21	328.10	Gas Engine Pumping Equipment				61,552		61,552	367,538
22		**Subtotal Pumping**	$ -	$ -	$ -	$ 2,251,140	$ -	$ 2,139,438	$ 10,741,696
23									
24		**Water Treatment**							
25	330.00	Land and Land Rights				-		$ -	$ -
26	331.00	Structures and Improvements				(685)		(685)	15,761
27	332.00	Water Treatment Equipment				(6,654)		(13,159)	203,198
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ (7,339)	$ -	$ (13,845)	$ 218,959
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights				-		$ -	$ -
32	341.00	Structures and Improvements				0		0	659
33	342.00	Distribution, Reservoirs, & ST				(130,014)		(224,970)	1,195,657
34	343.00	Transmission and Distribution				(1,608,537)		(1,608,537)	6,998,363
35	344.00	Fire Mains				-		-	-
36	345.00	Services				(887,369)		(887,369)	4,741,846
37	346.00	Meters				(83,950)		(83,950)	1,652,191
38	348.00	Hydrants				482,983		482,983	2,124,493
39	349.00	Other Transmission & Distribution				(88)		(88)	400
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ (2,226,974)	$ -	$ (2,321,931)	$ 16,713,610
41									
42		**General**							
43	389.00	Land and Land Rights			-			$ -	$ -
44	390.00	Structures and Improvements			(3,952)			(3,952)	127,425
45	391.00	Office Funiture and Equipment			2,257			2,257	135,811
46	391.10	Computer Equipment			(8,461)			(8,461)	(149,479)
47	392.00	Transportation Equipment			(3,992)			(3,992)	372,214
48	393.00	Stores Equipment			86			86	2,961
49	394.00	Tools, Shop and Garage			98			98	7,943
50	395.00	Laboratory Equipment			(26)			(26)	5,670
51	396.00	Power Operated Equipment			101			101	15,499
52	397.00	Communication Equipment			(699)			(699)	109,740
53	398.00	Miscellaneous Equipment			(6,623)			(6,623)	42,103
54		**Subtotal General**	$ -	$ -	$ (21,210)	$ -	$ -	$ (21,210)	$ 669,887
55									
56									
57		Youngtown Plant *						-	(47,020)
58		ADFUC adjustment 3/95 **	134,869					134,869	0
59		TOTAL WATER PLANT	$ 134,869	$ -	$ (21,210)	$ 265,742	$ -	$ (1,082,304)	$ 29,936,694
60									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American - Sun City Water
RCND Common Plant Allocation
at December 31, 2002

Exhibit
Schedule B-3
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Trended Amount	Rebuttal Allocated Trended Amount	Rebuttal Allocated Trended Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.23835	$ 3,010	$ 1,163	$ (1,847)	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.23835	1,083,429	1,055,140	(28,289)	120,618	116,667	(3,952)
5	391.00	Office Funiture and Equipment	0.23835	306,744	307,027	284	119,685	121,942	2,257
6	391.10	Computer Equipment	0.23835	378,675	215,055	(163,619)	(115,255)	(123,716)	(8,461)
7	392.00	Transportation Equipment	0.23835	474,024	467,378	(6,646)	275,434	271,442	(3,992)
8	393.00	Stores Equipment	0.23835	8,929	9,021	92	2,610	2,696	86
9	394.00	Tools, Shop and Garage	0.23835	124,849	124,640	(208)	3,362	3,460	98
10	395.00	Laboratory Equipment	0.23835	35,924	35,553	(370)	6,519	6,493	(26)
11	396.00	Power Operated Equipment	0.23835	36,792	37,182	390	13,363	13,464	101
12	397.00	Communication Equipment	0.23835	166,335	163,816	(2,518)	99,039	98,340	(699)
13	398.00	Miscellaneous Equipment	0.23835	94,021	87,620	(6,401)	46,867	40,244	(6,623)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 2,712,731	$ 2,503,598	$ (209,133)	$ 572,243	$ 551,032	$ (21,210)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-3, Page 5								
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 5
Witness: Bourassa

Line No.	Account No.	Description		Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Trended Direct Accumulated Depreciation	Adjustment	Rebuttal Trended Accumulated Depreciation
1									
2	389.00		0	$ 12,628	$ (7,748)	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements		4,545,571	(118,688)	4,426,882	506,059	(16,579)	489,480
4	391.00	Office Funiture and Equipment		1,286,955	1,191	1,288,146	502,142	9,471	511,613
5	391.10	Computer Equipment		1,588,744	(686,472)	902,272	(483,558)	(35,499)	(519,057)
6	392.00	Transportation Equipment		1,988,785	(27,882)	1,960,903	1,155,595	(16,750)	1,138,845
7	393.00	Stores Equipment		37,463	387	37,850	10,952	359	11,312
8	394.00	Tools, Shop and Garage		523,808	(874)	522,934	14,105	411	14,516
9	395.00	Laboratory Equipment		150,719	(1,554)	149,166	27,352	(109)	27,243
10	396.00	Power Operated Equipment		154,364	1,634	155,998	56,063	425	56,488
11	397.00	Communication Equipment		697,864	(10,566)	687,298	415,524	(2,934)	412,590
12	398.00	Miscellaneous Equipment		394,470	(26,855)	367,615	196,632	(27,786)	168,847
13									
14									
15		TOTALCOMMON PLANT		$ 11,381,370	$ (877,427)	$ 10,503,943	$ 2,400,866	$ (88,989)	$ 2,311,877
16									
17				SUPPORTING SCHEDULES					
18				Rebuttal Schedule B-3, Page 6a, 6b, 7a, 7b					
19									
20									

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6a

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880				(6,755)	-	-
3	390.00	Structures and Improvements	3,349,189				(78,054)	-	(2,575)
4	391.00	Office Furniture and Equipment	997,650				5,995	(2,202)	6,085
5	391.10	Computer Equipment	1,428,345		(670,782)		(12,717)	-	(2,402)
6	392.00	Transportation Equipment	1,797,409				(14,376)	(109)	(3,537)
7	393.00	Stores Equipment	28,727				732	-	59
8	394.00	Tools, Shop and Garage	411,051				1,875	(1,135)	(212)
9	395.00	Laboratory Equipment	130,207				(52)	-	116
10	396.00	Power Operated Equipment	120,325		(799)		3,730	-	(1,226)
11	397.00	Communication Equipment	577,488				(1,313)	-	1,715
12	398.00	Miscellaneous Equipment	277,101	(670)		(39,030)	12,635	(43)	454
13		**Subtotal General**	$ 9,122,373	$ (670)	$ (671,581)	$ (39,030)	$ (88,300)	$ (3,489)	$ (1,523)
14									
15									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

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Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights	-	(993)	-	-	-		$ (7,748)	$ (2,868)
3	390.00	Structures and Improvements	(17,341)	(10)	(3,192)	(2,612)	(14,906)		(118,688)	3,230,501
4	391.00	Office Funiture and Equipment	(4,567)	(247)	(2,019)	(906)	(947)		1,191	998,841
5	391.10	Computer Equipment	241	(255)	(556)	-	-		(686,472)	741,874
6	392.00	Transportation Equipment	(5,231)	(404)	(4,372)	148	-		(27,882)	1,769,527
7	393.00	Stores Equipment	(246)	(158)	-	-	-		387	29,114
8	394.00	Tools, Shop and Garage	(1,038)	(270)	(94)	-	-		(874)	410,177
9	395.00	Laboratory Equipment	124	-	-	(727)	(1,015)		(1,554)	128,654
10	396.00	Power Operated Equipment	11	-	-	(82)	-		1,634	121,959
11	397.00	Communication Equipment	(10,889)	(83)	3	-	-		(10,566)	566,923
12	398.00	Miscellaneous Equipment	413	(17)	(609)	11	-		(26,855)	250,246
13		**Subtotal General**	$ (38,523)	$ (2,436)	$ (10,839)	$ (4,168)	$ (16,868)	$ -	$ (877,427)	$ 8,244,946
14										
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ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 7a

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -				-	-	-
3	390.00	Structures and Improvements	310,963				(14,303)	-	(901)
4	391.00	Office Funiture and Equipment	360,503				3,247	526	6,108
5	391.10	Computer Equipment	(434,702)		(40,657)		5,273	-	118
6	392.00	Transportation Equipment	1,038,162				(9,526)	(109)	(2,171)
7	393.00	Stores Equipment	7,782				357	-	46
8	394.00	Tools, Shop and Garage	18,237				175	442	(60)
9	395.00	Laboratory Equipment	22,954				(18)	-	43
10	396.00	Power Operated Equipment	42,813		(440)		1,414	-	(546)
11	397.00	Communication Equipment	332,600				(1,154)	-	1,730
12	398.00	Miscellaneous Equipment	128,455	(670)		(39,030)	8,302	3,466	213
13		**Subtotal General**	$ 1,827,766	$ (670)	$ (41,096)	$ (39,030)	$ (6,233)	$ 4,325	$ 4,581
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
7b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights	-	-	-	-	-		$ -	$ -
3	390.00	Structures and Improvements	(492)	(2)	(259)	(93)	(529)		(16,579)	294,384
4	391.00	Office Furniture and Equipment	82	(44)	(274)	(80)	(94)		9,471	369,974
5	391.10	Computer Equipment	(9)	(178)	(48)	-	-		(35,499)	(470,201)
6	392.00	Transportation Equipment	(1,564)	(313)	(3,018)	(49)	-		(16,750)	1,021,413
7	393.00	Stores Equipment	5	(48)	-	-	-		359	8,141
8	394.00	Tools, Shop and Garage	(89)	(38)	(19)	-	-		411	18,648
9	395.00	Laboratory Equipment	28	-	-	(58)	(104)		(109)	22,845
10	396.00	Power Operated Equipment	1	-	-	(4)	-		425	43,238
11	397.00	Communication Equipment	(3,485)	(28)	3	-	-		(2,934)	329,666
12	398.00	Miscellaneous Equipment	150	(3)	(213)	0	-		(27,786)	100,670
13		**Subtotal General**	$ (5,372)	$ (654)	$ (3,829)	$ (284)	$ (727)	$ -	$ (88,989)	$ 1,738,777
14										
15										
16										
17										
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20										
21										
22										
23										
24										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona-American Sun City Water
B-3 Adjustments

Exhibit B-4
Page A1
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	B-2 Adjustments	Adjusted Original Cost	O.C. A/D	B-2 Adjustments	O.C. Adjusted A/D
1		**Intangible**						
2	301.00	Organization	471	-	471	-	-	-
3	302.00	Franchises	2,851	-	2,851	-	-	-
4	303.00	Miscellaneous Intangibles	4,591	-	4,591	-	-	-
5		**Subtotal Intangible**	7,913	-	7,913	-	-	-
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	180,083	-	180,083	-	-	-
9	311.00	Structures and Improvements	661,796	-	661,796	327,261	-	327,261
10	312.00	Collecting and Impounding Res.	314	-	314	49	-	49
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	2,387,315	(495,771)	1,891,544	843,819	(389,255)	454,564
13		**Subtotal Source of Supply**	3,229,508	(495,771)	2,733,737	1,171,129	(389,255)	781,874
14								
15		**Pumping**	-	-				
16	320.00	Land and Land Rights	8,456	-	8,456	-	-	-
17	321.00	Structures and Improvements	582,491	-	582,491	243,441	-	243,441
18	323.00	Other Power Production	9,554	-	9,554	2,035	-	2,035
19	325.00	Electric Pumping Equipment	6,605,868	(203,104)	6,402,764	3,665,585	(61,567)	3,604,017
20	326.00	Diesel Pumping Equipment	25,151	-	25,151	5,751	-	5,751
21	328.10	Gas Engine Pumping Equipment	249,781	-	249,781	129,986	-	129,986
22		**Subtotal Pumping**	7,481,300	(203,104)	7,278,197	4,046,797	(61,567)	3,985,230
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	-	-	-	-	-	-
26	331.00	Structures and Improvements	80,580	-	80,580	11,317	-	11,317
27	332.00	Water Treatment Equipment	407,427	(19,594)	387,833	137,849	(5,489)	132,360
28		**Subtotal Water Treatment**	488,007	(19,594)	468,414	149,166	(5,489)	143,677
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	10,493	-	10,493	-	-	-
32	341.00	Structures and Improvements	28,604	-	28,604	368	-	368
33	342.00	Distribution, Reservoirs, & ST	1,374,148	(319,215)	1,054,933	527,406	(79,535)	447,871
34	343.00	Transmission and Distribution	12,357,895	-	12,357,895	3,278,830	-	3,278,830
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	4,783,796	-	4,783,796	2,180,392	-	2,180,392
37	346.00	Meters	3,232,044	-	3,232,044	872,216	-	872,216
38	348.00	Hydrants	1,797,909	-	1,797,909	658,097	-	658,097
39	349.00	Other Transmission & Distribution	523	-	523	235	-	235
40		**Subtotal Trans & Dist**	23,585,412	(319,215)	23,266,197	7,517,543	(79,535)	7,438,008
41								
42		**General**						
43	389.00	Land and Land Rights	2,125	-	2,125	-	-	-
44	390.00	Structures and Improvements	1,288,964	-	1,288,964	236,191	-	236,191
45	391.00	Office Funiture and Equipment	604,605	-	604,605	327,480	-	327,480
46	391.10	Computer Equipment	1,248,360	(607,932)	640,428	(441,711)	(36,834)	(478,545)
47	392.00	Transportation Equipment	806,501	-	806,501	534,409	-	534,409
48	393.00	Stores Equipment	13,553	-	13,553	6,606	-	6,606
49	394.00	Tools, Shop and Garage	223,236	-	223,236	20,886	-	20,886
50	395.00	Laboratory Equipment	9,560	-	9,560	3,301	-	3,301
51	396.00	Power Operated Equipment	78,354	(669)	77,685	30,100	(368)	29,732
52	397.00	Communication Equipment	221,454	-	221,454	194,632	-	194,632
53	398.00	Miscellaneous Equipment	75,435	-	75,435	49,564	-	49,564
54		**Subtotal General**	4,572,145	(608,601)	3,963,544	961,458	(37,202)	924,256
55								
56								
57								
58								
59		TOTAL WATER PLANT	39,364,286	(1,646,284)	37,718,001	13,846,094	(573,048)	13,273,046
60								

Arizona-American Sun City Water
B-3 Adjustments

Exhibit B-4
Page A2
Witness: Bourassa

Line No.	Account No.	Description	RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted RCN	(B-3, page 2b, Adj. #9) Adjustment RCN Direct to RCN Rebuttal	Adjusted RCN Rebuttal
1		**Intangible**					
2	301.00	Organization	471	-	471	-	471
3	302.00	Franchises	7,100	-	7,100	(4,249)	2,851
4	303.00	Miscellaneous Intangibles	12,986	-	12,986	(8,395)	4,591
5		**Subtotal Intangible**	20,557	-	20,557	(12,644)	7,913
6							
7		**Source of Supply**					
8	310.00	Land and Land Rights	462,571	-	462,571	(282,489)	180,083
9	311.00	Structures and Improvements	1,579,138	-	1,579,138	(64,577)	1,514,561
10	312.00	Collecting and Impounding Res.	371	-	371	(27)	344
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-
12	314.00	Wells and Springs	5,148,822	(1,269,757)	3,879,065	(332,821)	3,546,244
13		**Subtotal Source of Supply**	7,190,902	(1,269,757)	5,921,145	(679,913)	5,241,232
14							
15		**Pumping**					
16	320.00	Land and Land Rights	19,028	-	19,028	(10,572)	8,456
17	321.00	Structures and Improvements	1,498,347	-	1,498,347	(50,275)	1,448,072
18	323.00	Other Power Production	11,219	-	11,219	(109)	11,109
19	325.00	Electric Pumping Equipment	13,532,678	(244,697)	13,287,981	3,781,527	17,069,508
20	326.00	Diesel Pumping Equipment	29,633	-	29,633	76	29,709
21	328.10	Gas Engine Pumping Equipment	575,961	-	575,961	118,278	694,239
22		**Subtotal Pumping**	15,666,867	(244,697)	15,422,170	3,838,924	19,261,095
23							
24		**Water Treatment**					
25	330.00	Land and Land Rights	-	-	-	-	-
26	331.00	Structures and Improvements	112,317	-	112,317	(4,879)	107,438
27	332.00	Water Treatment Equipment	615,391	(23,015)	592,376	(20,846)	571,531
28		**Subtotal Water Treatment**	727,709	(23,015)	704,693	(25,725)	678,969
29							
30		**Transmission and Distribution**					
31	340.00	Land and Land Rights	43,849	-	43,849	(33,356)	10,493
32	341.00	Structures and Improvements	28,951	-	28,951	1	28,952
33	342.00	Distribution, Reservoirs, & ST	3,671,541	(381,111)	3,290,430	(501,147)	2,789,283
34	343.00	Transmission and Distribution	32,083,367	-	32,083,367	(6,062,567)	26,020,800
35	344.00	Fire Mains	-	-	-	-	-
36	345.00	Services	12,220,449	-	12,220,449	(1,946,894)	10,273,555
37	346.00	Meters	6,283,128	-	6,283,128	(311,082)	5,972,046
38	348.00	Hydrants	4,435,480	-	4,435,480	1,319,500	5,754,980
39	349.00	Other Transmission & Distribution	1,073	-	1,073	(195)	878
40		**Subtotal Trans & Dist**	58,767,838	(381,111)	58,386,728	(7,535,740)	50,850,988
41							
42		**General**				**(Common Plant, B-2, Page 6)**	
43	389.00	Land and Land Rights	8,880	-	8,880	(6,755)	2,125
44	390.00	Structures and Improvements	2,291,516	-	2,291,516	(78,054)	2,213,462
45	391.00	Office Funiture and Equipment	829,727	-	829,727	5,995	835,722
46	391.10	Computer Equipment	1,388,207	(670,782)	717,425	(12,717)	704,708
47	392.00	Transportation Equipment	904,565	-	904,565	(14,376)	890,189
48	393.00	Stores Equipment	19,104	-	19,104	732	19,836
49	394.00	Tools, Shop and Garage	282,255	-	282,255	1,875	284,130
50	395.00	Laboratory Equipment	12,663	-	12,663	(52)	12,611
51	396.00	Power Operated Equipment	103,372	(799)	102,573	3,730	106,303
52	397.00	Communication Equipment	283,483	-	283,483	(1,313)	282,170
53	398.00	Miscellaneous Equipment	122,244	-	122,244	12,635	134,880
54		**Subtotal General**	6,246,016	(671,581)	5,574,436	(88,300)	5,486,136
55							
56							
57							
58							
59		TOTAL WATER PLANT	88,619,890	(2,590,161)	86,029,729	(4,503,398)	81,526,331

Arizona-American Sun City Water
B-3 Adjustments

Exhibit B-4
Page A3
Witness: Bourassa

Line No.	Account No.	Description	A/D RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted A/D RCN Rebuttal	Ratio	A/D RCN Rebttual	(B-3, page 3b, Adj. #9) A/D Adjustment Adjusted RCN Direct to RCN Rebuttal
1		**Intangible**						
2	301.00	Organization	-	-	-	1.0000	-	-
3	302.00	Franchises	-	-	-	1.0000	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	1.0000	-	-
5		**Subtotal Intangible**	-	-	-		-	-
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	-	-	-	1.0000	-	-
9	311.00	Structures and Improvements	780,892	-	780,892	2.2886	748,958	(31,934)
10	312.00	Collecting and Impounding Res.	57	-	57	1.0956	53	(4)
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	1,819,899	(1,248,541)	571,358	1.8748	852,212	280,853
13		**Subtotal Source of Supply**	2,600,848	(1,248,541)	1,352,307		1,601,223	248,916
14								
15		**Pumping**						
16	320.00	Land and Land Rights	-	-	-	1.0000	-	-
17	321.00	Structures and Improvements	626,205	-	626,205	2.4860	605,193	(21,012)
18	323.00	Other Power Production	2,390	-	2,390	1.1628	2,366	(23)
19	325.00	Electric Pumping Equipment	7,509,260	(111,701)	7,397,559	2.6660	9,608,164	2,210,605
20	326.00	Diesel Pumping Equipment	6,776	-	6,776	1.1813	6,793	17
21	328.10	Gas Engine Pumping Equipment	299,731	-	299,731	2.7794	361,283	61,552
22		**Subtotal Pumping**	8,444,361	(111,701)	8,332,660		10,583,800	2,251,140
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	-	-	-	-	-	-
26	331.00	Structures and Improvements	15,774	-	15,774	1.3333	15,089	(685)
27	332.00	Water Treatment Equipment	208,212	(6,506)	201,707	1.4736	195,053	(6,654)
28		**Subtotal Water Treatment**	223,986	(6,506)	217,481		210,142	(7,339)
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	-	-	-	1.0000	-	-
32	341.00	Structures and Improvements	373	-	373	1.0122	373	0
33	342.00	Distribution, Reservoirs, & ST	1,409,158	(94,957)	1,314,202	2.6440	1,184,188	(130,014)
34	343.00	Transmission and Distribution	8,512,444	-	8,512,444	2.1056	6,903,908	(1,608,537)
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	5,569,921	-	5,569,921	2.1476	4,682,552	(887,369)
37	346.00	Meters	1,695,596	-	1,695,596	1.8478	1,611,646	(83,950)
38	348.00	Hydrants	1,623,539	-	1,623,539	3.2009	2,106,522	482,983
39	349.00	Other Transmission & Distribution	483	-	483	1.6788	395	(88)
40		**Subtotal Trans & Dist**	18,811,515	(94,957)	18,716,559		16,489,584	(2,226,974)
41								
42		**General**						**(Common Plant, B-2, Page 7)**
43	389.00	Land and Land Rights	-	-	-	1.0000	-	-
44	390.00	Structures and Improvements	419,900	-	419,900	1.7172	405,598	(14,303)
45	391.00	Office Funiture and Equipment	449,415	-	449,415	1.3823	452,662	3,247
46	391.10	Computer Equipment	(491,194)	(40,657)	(531,850)	1.1004	(526,577)	5,273
47	392.00	Transportation Equipment	599,389	-	599,389	1.1038	589,862	(9,526)
48	393.00	Stores Equipment	9,312	-	9,312	1.4636	9,668	357
49	394.00	Tools, Shop and Garage	26,407	-	26,407	1.2728	26,583	175
50	395.00	Laboratory Equipment	4,373	-	4,373	1.3191	4,355	(18)
51	396.00	Power Operated Equipment	39,711	(440)	39,272	1.3684	40,685	1,414
52	397.00	Communication Equipment	249,148	-	249,148	1.2742	247,995	(1,154)
53	398.00	Miscellaneous Equipment	80,320	-	80,320	1.7880	88,622	8,302
54		**Subtotal General**	1,386,782	(41,096)	1,345,686		1,339,453	(6,233)
55								
56								
57								
58								
59		TOTAL WATER PLANT	31,467,494	(1,502,801)	29,964,693		30,224,202	259,509

Company Code: 4003 Business Area: 4504 Sun City Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W30100	ORGANIZATION	2001	470	180.2	180.2	1.0000	470	470
	W30100 Class Totals		470				470	470
W30200	FRANCH/CONSENTS	1962	710	0.0	0.0	1.0000	710	710
W30200	FRANCH/CONSENTS	1965	18	0.0	0.0	1.0000	18	18
W30200	FRANCH/CONSENTS	1977	107	180.2	59.9	3.0083	324	107
W30200	FRANCH/CONSENTS	1995	938	180.2	152.2	1.1840	1,111	938
W30200	FRANCH/CONSENTS	1997	1,075	180.2	160.6	1.1220	1,206	1,075
	W30200 Class Totals		2,850				3,371	2,850
W30300	MISC INTANG PLNT	1974	2,282	180.2	47.7	3.7778	8,622	2,282
W30300	MISC INTANG PLNT	1975	2,308	180.2	52.6	3.4259	7,908	2,308
	W30300 Class Totals		4,591				16,531	4,591
W31000	LAND/LAND RIGHTS	1962	16,496	0.0	0.0	1.0000	16,496	16,496
W31000	LAND/LAND RIGHTS	1966	76	180.2	33.0	5.4606	420	76
W31000	LAND/LAND RIGHTS	1971	3,101	180.2	39.5	4.5620	14,148	3,101
W31000	LAND/LAND RIGHTS	1972	962	180.2	40.8	4.4167	4,252	962
W31000	LAND/LAND RIGHTS	1973	12,589	180.2	43.1	4.1810	52,636	12,589
W31000	LAND/LAND RIGHTS	1975	903	180.2	52.6	3.4259	3,096	903
W31000	LAND/LAND RIGHTS	1976	858	180.2	55.8	3.2294	2,773	858

Company Code: 4003 Business Area: 4504 Sun City Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W31000	LAND/LAND RIGHTS	1978	113,644	180.2	65.0	2.7723	315,055	113,644
W31000	LAND/LAND RIGHTS	1979	3,572	180.2	72.6	2.4821	8,866	3,572
W31000	LAND/LAND RIGHTS	1982	7	180.2	97.4	1.8501	12	7
W31000	LAND/LAND RIGHTS	1987	24	180.2	113.2	1.5919	38	24
W31000	LAND/LAND RIGHTS	1996	27,845	180.2	156.6	1.1507	32,041	27,845
	W31000	Class Totals	180,082				449,839	180,082
W31100	STRUCT AND IMPROV	1963	301	350.0	61.0	5.7377	1,732	1,732
W31100	STRUCT AND IMPROV	1964	52	350.0	63.0	5.5556	294	294
W31100	STRUCT AND IMPROV	1965	3,352	350.0	64.0	5.4688	18,333	18,333
W31100	STRUCT AND IMPROV	1967	94	350.0	66.0	5.3030	503	503
W31100	STRUCT AND IMPROV	1969	32,765	350.0	74.0	4.7297	154,970	154,970
W31100	STRUCT AND IMPROV	1970	18,408	350.0	80.0	4.3750	80,536	80,536
W31100	STRUCT AND IMPROV	1971	9,931	350.0	88.0	3.9773	39,498	39,498
W31100	STRUCT AND IMPROV	1972	2,807	350.0	93.0	3.7634	10,565	10,565
W31100	STRUCT AND IMPROV	1974	50,290	350.0	121.0	2.8926	145,471	145,471
W31100	STRUCT AND IMPROV	1975	52,331	350.0	136.0	2.5735	134,674	134,674
W31100	STRUCT AND IMPROV	1976	178,775	350.0	140.0	2.5000	446,939	446,939
W31100	STRUCT AND IMPROV	1977	13,575	350.0	149.0	2.3490	31,888	31,888
W31100	STRUCT AND IMPROV	1978	10,806	350.0	164.0	2.1341	23,062	23,062
W31100	STRUCT AND IMPROV	1979	108,702	350.0	182.0	1.9231	209,044	209,044
W31100	STRUCT AND IMPROV	1982	711	350.0	226.0	1.5487	1,102	1,102
W31100	STRUCT AND IMPROV	1983	5,003	350.0	233.0	1.5021	7,515	7,515
W31100	STRUCT AND IMPROV	1986	12,659	350.0	246.0	1.4228	18,011	18,011
W31100	STRUCT AND IMPROV	1987	463	350.0	249.0	1.4056	651	651

Company Code: 4003 Business Area: 4504 Sun City Water

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W31100	STRUCT AND IMPROV		1988	1,951	350.0	249.0	1.4056	2,743	2,743
W31100	STRUCT AND IMPROV		1988	5,253	350.0	255.0	1.3725	7,210	7,210
W31100	STRUCT AND IMPROV		1989	264	350.0	253.0	1.3834	365	365
W31100	STRUCT AND IMPROV		1989	973	350.0	250.0	1.4000	1,363	1,363
W31100	STRUCT AND IMPROV		1990	375	350.0	259.0	1.3514	507	507
W31100	STRUCT AND IMPROV		1991	6,265	350.0	260.0	1.3462	8,434	8,434
W31100	STRUCT AND IMPROV		1991	619	350.0	262.0	1.3359	827	827
W31100	STRUCT AND IMPROV		1992	4,102	350.0	259.0	1.3514	5,544	5,544
W31100	STRUCT AND IMPROV		1993	1,284	350.0	274.0	1.2774	1,640	1,640
W31100	STRUCT AND IMPROV		1994	9,088	350.0	286.0	1.2238	11,122	11,122
W31100	STRUCT AND IMPROV		1994	2,329	350.0	291.0	1.2027	2,801	2,801
W31100	STRUCT AND IMPROV		1995	2,507	350.0	296.0	1.1824	2,965	2,965
W31100	STRUCT AND IMPROV		1995	44,056	350.0	298.0	1.1745	51,744	51,744
W31100	STRUCT AND IMPROV		1996	44,278	350.0	303.0	1.1551	51,146	51,146
W31100	STRUCT AND IMPROV		1996	9,268	350.0	308.0	1.1364	10,533	10,533
W31100	STRUCT AND IMPROV		1997	4,959	350.0	314.0	1.1146	5,527	5,527
W31100	STRUCT AND IMPROV		1998	6,820	350.0	316.0	1.1076	7,554	7,554
W31100	STRUCT AND IMPROV		1998	2,829	350.0	318.0	1.1006	3,113	3,113
W31100	STRUCT AND IMPROV		1999	13,531	350.0	324.0	1.0802	14,617	14,617
		W31100	Class Totals	661,796				1,514,560	1,514,560
W31200	COL/IMPOUND RESER		1996	313	275.0	251.0	1.0956	343	343
		W31200	Class Totals	313				343	343

Company Code: 4003 Business Area: 4504 Sun City Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W31400	WELLS AND SPRINGS	1960	70,926	321.0	57.0	5.6316	399,430	399,430
W31400	WELLS AND SPRINGS	1961	58,744	321.0	59.0	5.4407	319,609	319,609
W31400	WELLS AND SPRINGS	1962	4,214	321.0	61.0	5.2623	22,176	22,176
W31400	WELLS AND SPRINGS	1965	3,118	321.0	65.0	4.9385	15,400	15,400
W31400	WELLS AND SPRINGS	1967	24,030	321.0	69.0	4.6522	111,793	111,793
W31400	WELLS AND SPRINGS	1968	5,938	321.0	73.0	4.3973	26,114	26,114
W31400	WELLS AND SPRINGS	1969	51,109	321.0	77.0	4.1688	213,066	213,066
W31400	WELLS AND SPRINGS	1974	102,220	321.0	120.0	2.6750	273,439	273,439
W31400	WELLS AND SPRINGS	1975	216,558	321.0	134.0	2.3955	518,765	518,765
W31400	WELLS AND SPRINGS	1979	58,018	321.0	190.0	1.6895	98,021	98,021
W31400	WELLS AND SPRINGS	1983	32,441	321.0	221.0	1.4525	47,121	47,121
W31400	WELLS AND SPRINGS	1992	2,164	321.0	246.0	1.3049	2,824	2,824
W31400	WELLS AND SPRINGS	1993	4,807	321.0	252.0	1.2738	6,123	6,123
W31400	WELLS AND SPRINGS	1994	427,830	321.0	263.0	1.2205	522,167	522,167
W31400	WELLS AND SPRINGS	1995	10,823	321.0	274.0	1.1715	12,680	12,680
W31400	WELLS AND SPRINGS	1995	20,069	321.0	274.0	1.1715	23,511	23,511
W31400	WELLS AND SPRINGS	1996	17,001	321.0	281.0	1.1423	19,421	19,421
W31400	WELLS AND SPRINGS	1996	13,957	321.0	288.0	1.1146	15,556	15,556
W31400	WELLS AND SPRINGS	1997	12,549	321.0	291.0	1.1031	13,843	13,843
W31400	WELLS AND SPRINGS	1997	1,228	321.0	296.0	1.0845	1,332	1,332
W31400	WELLS AND SPRINGS	1998	1,376	321.0	301.0	1.0664	1,467	1,467
W31400	WELLS AND SPRINGS	1999	841,160	321.0	306.0	1.0490	882,377	882,377
	W31400	Class Totals	1,980,290				3,546,244	3,546,244
W32000	LAND/LAND RIGHTS	1978	8,456	180.2	65.0	2.7723	23,443	8,456

	W32000	Class Totals	8,456				23,443	8,456
W32100	STRUCT AND IMPROV	1969	2,346	350.0	74.0	4.7297	11,098	11,098
W32100	STRUCT AND IMPROV	1971	60,021	350.0	88.0	3.9773	238,725	238,725
W32100	STRUCT AND IMPROV	1972	3,834	350.0	93.0	3.7634	14,429	14,429
W32100	STRUCT AND IMPROV	1973	86,088	350.0	100.0	3.5000	301,310	301,310
W32100	STRUCT AND IMPROV	1974	3,949	350.0	121.0	2.8926	11,423	11,423
W32100	STRUCT AND IMPROV	1975	23,909	350.0	136.0	2.5735	61,530	61,530
W32100	STRUCT AND IMPROV	1976	6,036	350.0	140.0	2.5000	15,091	15,091
W32100	STRUCT AND IMPROV	1977	124,472	350.0	149.0	2.3490	292,386	292,386
W32100	STRUCT AND IMPROV	1978	89,050	350.0	164.0	2.1341	190,041	190,041
W32100	STRUCT AND IMPROV	1979	118,042	350.0	182.0	1.9231	227,006	227,006
W32100	STRUCT AND IMPROV	1980	127	350.0	207.0	1.6908	216	216
W32100	STRUCT AND IMPROV	1981	844	350.0	220.0	1.5909	1,344	1,344
W32100	STRUCT AND IMPROV	1984	4,682	350.0	238.0	1.4706	6,885	6,885
W32100	STRUCT AND IMPROV	1986	10,679	350.0	246.0	1.4228	15,195	15,195
W32100	STRUCT AND IMPROV	1987	459	350.0	249.0	1.4056	646	646
W32100	STRUCT AND IMPROV	1989	648	350.0	253.0	1.3834	896	896
W32100	STRUCT AND IMPROV	1992	31,816	350.0	266.0	1.3158	41,864	41,864
W32100	STRUCT AND IMPROV	1994	1,958	350.0	291.0	1.2027	2,355	2,355
W32100	STRUCT AND IMPROV	1995	186	350.0	296.0	1.1824	221	221
W32100	STRUCT AND IMPROV	1996	13,333	350.0	303.0	1.1551	15,401	15,401
	W32100	Class Totals	582,490				1,448,072	1,448,072
W32300	OTH PWR PROD EQUIP	1991	682	531.0	357.0	1.4874	1,014	1,014
W32300	OTH PWR PROD EQUIP	1993	611	531.0	369.0	1.4390	879	879
W32300	OTH PWR PROD EQUIP	1997	8,260	531.0	476.0	1.1155	9,214	9,214

	W32300	Class Totals	9,554				11,109	11,109
W32500	ELEC PUMP EQUIP	1961	64,390	531.0	71.0	7.4789	481,566	481,566
W32500	ELEC PUMP EQUIP	1971	305,173	531.0	93.0	5.7097	1,742,447	1,742,447
W32500	ELEC PUMP EQUIP	1972	262,129	531.0	96.0	5.5313	1,449,919	1,449,919
W32500	ELEC PUMP EQUIP	1973	820,755	531.0	100.0	5.3100	4,358,212	4,358,212
W32500	ELEC PUMP EQUIP	1974	123,050	531.0	122.0	4.3525	535,576	535,576
W32500	ELEC PUMP EQUIP	1975	218,004	531.0	155.0	3.4258	746,838	746,838
W32500	ELEC PUMP EQUIP	1976	233,148	531.0	174.0	3.0517	711,500	711,500
W32500	ELEC PUMP EQUIP	1977	438,048	531.0	184.0	2.8859	1,264,165	1,264,165
W32500	ELEC PUMP EQUIP	1978	123,984	531.0	192.0	2.7656	342,890	342,890
W32500	ELEC PUMP EQUIP	1979	426,430	531.0	205.0	2.5902	1,104,538	1,104,538
W32500	ELEC PUMP EQUIP	1980	4,879	531.0	222.0	2.3919	11,672	11,672
W32500	ELEC PUMP EQUIP	1981	23,107	531.0	245.0	2.1673	50,081	50,081
W32500	ELEC PUMP EQUIP	1982	4,950	531.0	260.0	2.0423	10,111	10,111
W32500	ELEC PUMP EQUIP	1983	13,513	531.0	271.0	1.9594	26,479	26,479
W32500	ELEC PUMP EQUIP	1984	11,352	531.0	277.0	1.9170	21,763	21,763
W32500	ELEC PUMP EQUIP	1985	4,098	531.0	282.0	1.8830	7,717	7,717
W32500	ELEC PUMP EQUIP	1986	18,077	531.0	284.0	1.8697	33,799	33,799
W32500	ELEC PUMP EQUIP	1987	22,271	531.0	299.0	1.7759	39,551	39,551
W32500	ELEC PUMP EQUIP	1988	49,117	531.0	330.0	1.6091	79,034	79,034
W32500	ELEC PUMP EQUIP	1988	105,047	531.0	303.0	1.7525	184,095	184,095
W32500	ELEC PUMP EQUIP	1989	14,830	531.0	309.0	1.7184	25,485	25,485
W32500	ELEC PUMP EQUIP	1989	13,481	531.0	336.0	1.5804	21,306	21,306
W32500	ELEC PUMP EQUIP	1990	41,246	531.0	340.0	1.5618	64,418	64,418
W32500	ELEC PUMP EQUIP	1990	11,842	531.0	349.0	1.5215	18,019	18,019
W32500	ELEC PUMP EQUIP	1991	40,995	531.0	357.0	1.4874	60,976	60,976
W32500	ELEC PUMP EQUIP	1991	60,631	531.0	350.0	1.5171	91,983	91,983

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W32500	ELEC PUMP EQUIP		1992	132,146	531.0	363.0	1.4628	193,303	193,303
W32500	ELEC PUMP EQUIP		1993	50,676	531.0	369.0	1.4390	72,923	72,923
W32500	ELEC PUMP EQUIP		1993	130,016	531.0	378.0	1.4048	182,647	182,647
W32500	ELEC PUMP EQUIP		1994	234,554	531.0	420.0	1.2643	296,547	296,547
W32500	ELEC PUMP EQUIP		1994	60,743	531.0	426.0	1.2465	75,716	75,716
W32500	ELEC PUMP EQUIP		1995	260,968	531.0	438.0	1.2123	316,371	316,371
W32500	ELEC PUMP EQUIP		1995	239,733	531.0	437.0	1.2151	291,300	291,300
W32500	ELEC PUMP EQUIP		1996	12,760	531.0	454.0	1.1696	14,925	14,925
W32500	ELEC PUMP EQUIP		1996	204,598	531.0	446.0	1.1906	243,594	243,594
W32500	ELEC PUMP EQUIP		1997	96,582	531.0	454.0	1.1696	112,963	112,963
W32500	ELEC PUMP EQUIP		1997	120,888	531.0	476.0	1.1155	134,851	134,851
W32500	ELEC PUMP EQUIP		1998	185,802	531.0	485.0	1.0948	203,416	203,416
W32500	ELEC PUMP EQUIP		1998	122,056	531.0	486.0	1.0926	133,358	133,358
W32500	ELEC PUMP EQUIP		1999	38,644	531.0	499.0	1.0641	41,121	41,121
W32500	ELEC PUMP EQUIP		1999	640,085	531.0	499.0	1.0641	681,115	681,115
W32500	ELEC PUMP EQUIP		2000	138,367	531.0	523.0	1.0153	140,484	140,484
W32500	ELEC PUMP EQUIP		2000	132,385	531.0	532.0	0.9981	132,133	132,133
W32500	ELEC PUMP EQUIP		2001	318,581	531.0	531.0	1.0000	318,581	318,581
		W32500	Class Totals	6,574,153				17,069,508	17,069,508
W32600	DIESEL PUMP EQUIP		1992	496	531.0	363.0	1.4628	725	725
W32600	DIESEL PUMP EQUIP		1992	5,500	531.0	370.0	1.4351	7,893	7,893
W32600	DIESEL PUMP EQUIP		1993	1,736	531.0	369.0	1.4390	2,498	2,498
W32600	DIESEL PUMP EQUIP		1997	539	531.0	476.0	1.1155	601	601
W32600	DIESEL PUMP EQUIP		1998	1,040	531.0	486.0	1.0926	1,137	1,137

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W32600	DIESEL PUMP EQUIP		1999	15,838	531.0	499.0	1.0641	16,854	16,854
	W32600	Class Totals		25,150				29,709	29,709
W32800	OTHER PUMP EQUIP		1965	1,640	531.0	74.0	7.1757	11,768	11,768
W32800	OTHER PUMP EQUIP		1969	55,567	531.0	84.0	6.3214	351,261	351,261
W32800	OTHER PUMP EQUIP		1970	10,904	531.0	89.0	5.9663	65,056	65,056
W32800	OTHER PUMP EQUIP		1974	986	531.0	122.0	4.3525	4,291	4,291
W32800	OTHER PUMP EQUIP		1982	34,586	531.0	260.0	2.0423	70,634	70,634
W32800	OTHER PUMP EQUIP		1986	22,608	531.0	284.0	1.8697	42,270	42,270
W32800	OTHER PUMP EQUIP		1988	4,556	531.0	330.0	1.6091	7,331	7,331
W32800	OTHER PUMP EQUIP		1990	3,972	531.0	340.0	1.5618	6,203	6,203
W32800	OTHER PUMP EQUIP		1990	7,647	531.0	349.0	1.5215	11,634	11,634
W32800	OTHER PUMP EQUIP		1993	8,191	531.0	369.0	1.4390	11,787	11,787
W32800	OTHER PUMP EQUIP		1994	11,353	531.0	420.0	1.2643	14,353	14,353
W32800	OTHER PUMP EQUIP		1995	53	531.0	438.0	1.2123	64	64
W32800	OTHER PUMP EQUIP		1995	10,804	531.0	437.0	1.2151	13,129	13,129
W32800	OTHER PUMP EQUIP		1996	3,483	531.0	454.0	1.1696	4,073	4,073
W32800	OTHER PUMP EQUIP		1996	5,722	531.0	446.0	1.1906	6,812	6,812
W32800	OTHER PUMP EQUIP		1997	1,392	531.0	476.0	1.1155	1,553	1,553
W32800	OTHER PUMP EQUIP		1998	55,493	531.0	485.0	1.0948	60,754	60,754
W32800	OTHER PUMP EQUIP		1999	6,812	531.0	499.0	1.0641	7,248	7,248
	W32800	Class Totals		245,772				690,230	690,230
W32810	OTHER PUMP EQUIPMNT		2001	4,008	531.0	531.0	1.0000	4,008	4,008

	W32810	Class Totals	4,008				4,008	4,008
W33100	WATER TREAT EQUIP STRUCT &	1985	36,846	350.0	241.0	1.4523	53,511	53,511
W33100	WATER TREAT EQUIP STRUCT &	1986	3,014	350.0	246.0	1.4228	4,288	4,288
W33100	WATER TREAT EQUIP STRUCT &	1994	39,361	350.0	286.0	1.2238	48,170	48,170
W33100	WATER TREAT EQUIP STRUCT &	1999	1,358	350.0	324.0	1.0802	1,467	1,467
	W33100	Class Totals	80,580				107,438	107,438
W33200	WATER TREAT EQUIP	1976	56,577	403.0	158.0	2.5506	144,305	144,305
W33200	WATER TREAT EQUIP	1977	10,679	403.0	169.0	2.3846	25,465	25,465
W33200	WATER TREAT EQUIP	1978	2,307	403.0	183.0	2.2022	5,080	5,080
W33200	WATER TREAT EQUIP	1979	12,079	403.0	200.0	2.0150	24,339	24,339
W33200	WATER TREAT EQUIP	1981	1,500	403.0	239.0	1.6862	2,529	2,529
W33200	WATER TREAT EQUIP	1985	19,187	403.0	282.0	1.4291	27,420	27,420
W33200	WATER TREAT EQUIP	1986	34,830	403.0	287.0	1.4042	48,908	48,908
W33200	WATER TREAT EQUIP	1988	20,637	403.0	295.0	1.3661	28,192	28,192
W33200	WATER TREAT EQUIP	1988	473	403.0	299.0	1.3478	638	638
W33200	WATER TREAT EQUIP	1989	15,616	403.0	301.0	1.3389	20,908	20,908
W33200	WATER TREAT EQUIP	1989	3,464	403.0	309.0	1.3042	4,517	4,517
W33200	WATER TREAT EQUIP	1990	7,646	403.0	311.0	1.2958	9,908	9,908
W33200	WATER TREAT EQUIP	1991	2,940	403.0	312.0	1.2917	3,798	3,798
W33200	WATER TREAT EQUIP	1991	6,840	403.0	313.0	1.2875	8,806	8,806
W33200	WATER TREAT EQUIP	1993	14,552	403.0	327.0	1.2324	17,934	17,934
W33200	WATER TREAT EQUIP	1994	13,327	403.0	334.0	1.2066	16,081	16,081
W33200	WATER TREAT EQUIP	1995	8,911	403.0	337.0	1.1958	10,656	10,656
W33200	WATER TREAT EQUIP	1995	8,662	403.0	335.0	1.2030	10,421	10,421
W33200	WATER TREAT EQUIP	1996	8,289	403.0	347.0	1.1614	9,627	9,627

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W33200	WATER TREAT EQUIP	1997	60,943	403.0	360.0	1.1194	68,219	68,219
W33200	WATER TREAT EQUIP	1998	1,598	403.0	367.0	1.0981	1,755	1,755
W33200	WATER TREAT EQUIP	1998	47,611	403.0	370.0	1.0892	51,857	51,857
W33200	WATER TREAT EQUIP	1999	7,863	403.0	379.0	1.0633	8,360	8,360
W33200	WATER TREAT EQUIP	2000	15,052	403.0	390.0	1.0333	15,554	15,554
W33200	WATER TREAT EQUIP	2001	6,243	403.0	403.0	1.0000	6,243	6,243
	W33200	Class Totals	387,833				571,530	571,530
W34000	LAND/LAND RIGHTS	1971	10,493	180.2	39.5	4.5620	47,869	10,493
	W34000	Class Totals	10,493				47,869	10,493
W34100	STRUCT AND IMPROV	2000	9,793	350.0	338.0	1.0355	10,141	10,141
W34100	STRUCT AND IMPROV	2001	18,810	350.0	350.0	1.0000	18,810	18,810
	W34100	Class Totals	28,603				28,951	28,951
W34200	DIST RESRV & STNDPIP	1960	13,595	275.0	35.0	7.8571	106,817	106,817
W34200	DIST RESRV & STNDPIP	1961	18,743	275.0	35.0	7.8571	147,265	147,265
W34200	DIST RESRV & STNDPIP	1962	26,217	275.0	35.0	7.8571	205,989	205,989
W34200	DIST RESRV & STNDPIP	1964	179	275.0	44.0	6.2500	1,118	1,118
W34200	DIST RESRV & STNDPIP	1965	2,632	275.0	45.0	6.1111	16,084	16,084
W34200	DIST RESRV & STNDPIP	1967	197	275.0	47.0	5.8511	1,152	1,152
W34200	DIST RESRV & STNDPIP	1968	1,435	275.0	49.0	5.6122	8,053	8,053

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34200	DIST RESRV & STNDPIP	1969	77,841	275.0	53.0	5.1887	403,893	403,893
W34200	DIST RESRV & STNDPIP	1970	15,971	275.0	75.0	3.6667	58,560	58,560
W34200	DIST RESRV & STNDPIP	1971	95,796	275.0	82.0	3.3537	321,271	321,271
W34200	DIST RESRV & STNDPIP	1973	226,928	275.0	100.0	2.7500	624,052	624,052
W34200	DIST RESRV & STNDPIP	1975	138,944	275.0	159.0	1.7296	240,317	240,317
W34200	DIST RESRV & STNDPIP	1977	141,840	275.0	172.0	1.5988	226,773	226,773
W34200	DIST RESRV & STNDPIP	1979	221,555	275.0	178.0	1.5449	342,280	342,280
W34200	DIST RESRV & STNDPIP	1987	1,594	275.0	196.0	1.4031	2,236	2,236
W34200	DIST RESRV & STNDPIP	1988	15,953	275.0	221.0	1.2443	19,850	19,850
W34200	DIST RESRV & STNDPIP	1990	19,811	275.0	221.0	1.2443	24,650	24,650
W34200	DIST RESRV & STNDPIP	1990	4,881	275.0	232.0	1.1853	5,785	5,785
W34200	DIST RESRV & STNDPIP	1991	17,862	275.0	259.0	1.0618	18,965	18,965
W34200	DIST RESRV & STNDPIP	1993	2,668	275.0	254.0	1.0827	2,889	2,889
W34200	DIST RESRV & STNDPIP	1996	10,289	275.0	251.0	1.0956	11,273	11,273
	W34200	Class Totals	1,054,932				2,789,283	2,789,283
W34300	TRANS/DISTR	1960	193,258	324.0	71.0	4.5634	881,917	881,917
W34300	TRANS/DISTR	1961	167,353	324.0	73.0	4.4384	742,783	742,783
W34300	TRANS/DISTR	1962	51,943	324.0	75.0	4.3200	224,393	224,393
W34300	TRANS/DISTR	1963	3,271	324.0	76.0	4.2632	13,944	13,944
W34300	TRANS/DISTR	1964	5,411	324.0	78.0	4.1538	22,476	22,476
W34300	TRANS/DISTR	1965	122,945	324.0	77.0	4.2078	517,327	517,327
W34300	TRANS/DISTR	1966	50,891	324.0	78.0	4.1538	211,391	211,391
W34300	TRANS/DISTR	1967	151,320	324.0	79.0	4.1013	620,608	620,608
W34300	TRANS/DISTR	1968	219,191	324.0	80.0	4.0500	887,723	887,723

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W34300	TRANS/DISTR	1969	494,464	324.0	83.0	3.9036	1,930,189	1,930,189
W34300	TRANS/DISTR	1970	717,460	324.0	87.0	3.7241	2,671,892	2,671,892
W34300	TRANS/DISTR	1971	938,981	324.0	95.0	3.4105	3,202,394	3,202,394
W34300	TRANS/DISTR	1972	415,282	324.0	98.0	3.3061	1,372,963	1,372,963
W34300	TRANS/DISTR	1973	154,207	324.0	100.0	3.2400	499,630	499,630
W34300	TRANS/DISTR	1974	576,214	324.0	133.0	2.4361	1,403,714	1,403,714
W34300	TRANS/DISTR	1975	491,054	324.0	151.0	2.1457	1,053,654	1,053,654
W34300	TRANS/DISTR	1976	421,249	324.0	259.0	1.2510	526,982	526,982
W34300	TRANS/DISTR	1977	771,092	324.0	166.0	1.9518	1,505,017	1,505,017
W34300	TRANS/DISTR	1978	537,503	324.0	179.0	1.8101	972,934	972,934
W34300	TRANS/DISTR	1979	79,226	324.0	193.0	1.6788	133,004	133,004
W34300	TRANS/DISTR	1980	37,126	324.0	209.0	1.5502	57,552	57,552
W34300	TRANS/DISTR	1981	5,197	324.0	224.0	1.4464	7,516	7,516
W34300	TRANS/DISTR	1982	115,434	324.0	239.0	1.3556	156,482	156,482
W34300	TRANS/DISTR	1983	203,331	324.0	246.0	1.3171	267,807	267,807
W34300	TRANS/DISTR	1984	205,847	324.0	244.0	1.3279	273,344	273,344
W34300	TRANS/DISTR	1985	402,276	324.0	248.0	1.3065	525,573	525,573
W34300	TRANS/DISTR	1986	216,958	324.0	245.0	1.3224	286,905	286,905
W34300	TRANS/DISTR	1987	84,025	324.0	252.0	1.2857	108,031	108,031
W34300	TRANS/DISTR	1988	36,272	324.0	264.0	1.2273	44,516	44,516
W34300	TRANS/DISTR	1989	15,509	324.0	269.0	1.2045	18,681	18,681
W34300	TRANS/DISTR	1989	42,156	324.0	273.0	1.1868	50,031	50,031
W34300	TRANS/DISTR	1990	193,331	324.0	273.0	1.1868	229,445	229,445
W34300	TRANS/DISTR	1990	27,808	324.0	275.0	1.1782	32,763	32,763
W34300	TRANS/DISTR	1991	16,573	324.0	277.0	1.1697	19,385	19,385
W34300	TRANS/DISTR	1991	75,224	324.0	279.0	1.1613	87,358	87,358
W34300	TRANS/DISTR	1992	45,705	324.0	274.0	1.1825	54,047	54,047

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W34300	TRANS/DISTR	1992	39,159	324.0	277.0	1.1697	45,804	45,804
W34300	TRANS/DISTR	1993	90,163	324.0	281.0	1.1530	103,958	103,958
W34300	TRANS/DISTR	1993	353,750	324.0	285.0	1.1368	402,143	402,143
W34300	TRANS/DISTR	1994	162,743	324.0	291.0	1.1134	181,198	181,198
W34300	TRANS/DISTR	1994	46,812	324.0	289.0	1.1211	52,480	52,480
W34300	TRANS/DISTR	1995	8,337	324.0	291.0	1.1134	9,282	9,282
W34300	TRANS/DISTR	1995	579,727	324.0	286.0	1.1329	656,773	656,773
W34300	TRANS/DISTR	1996	9,211	324.0	289.0	1.1211	10,327	10,327
W34300	TRANS/DISTR	1996	214,561	324.0	292.0	1.1096	238,077	238,077
W34300	TRANS/DISTR	1997	21,633	324.0	297.0	1.0909	23,599	23,599
W34300	TRANS/DISTR	1997	827,980	324.0	299.0	1.0836	897,200	897,200
W34300	TRANS/DISTR	1998	21,585	324.0	301.0	1.0764	23,234	23,234
W34300	TRANS/DISTR	1998	63,933	324.0	300.0	1.0800	69,047	69,047
W34300	TRANS/DISTR	1999	165,542	324.0	313.0	1.0351	171,353	171,353
W34300	TRANS/DISTR	1999	788,437	324.0	306.0	1.0588	834,797	834,797
W34300	TRANS/DISTR	2000	285,362	324.0	316.0	1.0253	292,582	292,582
W34300	TRANS/DISTR	2001	54,943	324.0	320.0	1.0125	55,630	55,630
W34300	TRANS/DISTR	2001	338,915	324.0	324.0	1.0000	338,915	338,915
	W34300	Class Totals	12,357,894				26,020,799	26,020,799
W34500	SERVICES	1960	63,549	288.0	50.0	5.7600	366,045	366,045
W34500	SERVICES	1961	34,032	288.0	53.0	5.4340	184,934	184,934
W34500	SERVICES	1962	20,983	288.0	56.0	5.1429	107,913	107,913
W34500	SERVICES	1964	620	288.0	59.0	4.8814	3,026	3,026
W34500	SERVICES	1965	34,232	288.0	61.0	4.7213	161,619	161,619

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W34500	SERVICES	1966	26,624	288.0	62.0	4.6452	123,673	123,673
W34500	SERVICES	1967	39,930	288.0	66.0	4.3636	174,238	174,238
W34500	SERVICES	1968	115,737	288.0	68.0	4.2353	490,180	490,180
W34500	SERVICES	1969	176,946	288.0	72.0	4.0000	707,784	707,784
W34500	SERVICES	1970	220,816	288.0	83.0	3.4699	766,209	766,209
W34500	SERVICES	1971	288,610	288.0	88.0	3.2727	944,533	944,533
W34500	SERVICES	1972	238,166	288.0	92.0	3.1304	745,554	745,554
W34500	SERVICES	1973	122,650	288.0	100.0	2.8800	353,232	353,232
W34500	SERVICES	1974	323,748	288.0	118.0	2.4407	790,171	790,171
W34500	SERVICES	1975	167,514	288.0	124.0	2.3226	389,068	389,068
W34500	SERVICES	1976	124,332	288.0	129.0	2.2326	277,583	277,583
W34500	SERVICES	1977	273,052	288.0	142.0	2.0282	553,804	553,804
W34500	SERVICES	1978	313,458	288.0	150.0	1.9200	601,839	601,839
W34500	SERVICES	1979	21,291	288.0	168.0	1.7143	36,499	36,499
W34500	SERVICES	1980	22,423	288.0	181.0	1.5912	35,679	35,679
W34500	SERVICES	1981	13,473	288.0	192.0	1.5000	20,209	20,209
W34500	SERVICES	1982	21,350	288.0	198.0	1.4545	31,054	31,054
W34500	SERVICES	1983	26,931	288.0	207.0	1.3913	37,469	37,469
W34500	SERVICES	1984	19,872	288.0	211.0	1.3649	27,123	27,123
W34500	SERVICES	1985	109,744	288.0	211.0	1.3649	149,789	149,789
W34500	SERVICES	1986	36,431	288.0	222.0	1.2973	47,261	47,261
W34500	SERVICES	1987	41,048	288.0	227.0	1.2687	52,078	52,078
W34500	SERVICES	1988	36,876	288.0	228.0	1.2632	46,581	46,581
W34500	SERVICES	1988	1,937	288.0	230.0	1.2522	2,425	2,425
W34500	SERVICES	1989	379	288.0	221.0	1.3032	494	494
W34500	SERVICES	1989	71,382	288.0	224.0	1.2857	91,775	91,775
W34500	SERVICES	1990	109,759	288.0	226.0	1.2743	139,867	139,867

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34500	SERVICES		1990	1,766	288.0	228.0	1.2632	2,231	2,231
W34500	SERVICES		1991	53,059	288.0	235.0	1.2255	65,024	65,024
W34500	SERVICES		1991	1,764	288.0	236.0	1.2203	2,153	2,153
W34500	SERVICES		1992	140,410	288.0	241.0	1.1950	167,790	167,790
W34500	SERVICES		1992	5,404	288.0	251.0	1.1474	6,201	6,201
W34500	SERVICES		1993	80,892	288.0	251.0	1.1474	92,816	92,816
W34500	SERVICES		1994	228,666	288.0	265.0	1.0868	248,515	248,515
W34500	SERVICES		1994	2,237	288.0	250.0	1.1520	2,577	2,577
W34500	SERVICES		1995	9,679	288.0	253.0	1.1383	11,018	11,018
W34500	SERVICES		1995	171,847	288.0	255.0	1.1294	194,084	194,084
W34500	SERVICES		1996	180,773	288.0	262.0	1.0992	198,706	198,706
W34500	SERVICES		1997	126,662	288.0	266.0	1.0827	137,137	137,137
W34500	SERVICES		1998	2,262	288.0	261.0	1.1034	2,495	2,495
W34500	SERVICES		1999	115,020	288.0	271.0	1.0627	122,231	122,231
W34500	SERVICES		1999	214,872	288.0	274.0	1.0511	225,852	225,852
W34500	SERVICES		2000	120,499	288.0	278.0	1.0360	124,837	124,837
W34500	SERVICES		2001	7,649	288.0	285.0	1.0105	7,729	7,729
W34500	SERVICES		2001	202,428	288.0	288.0	1.0000	202,428	202,428
		W34500	Class Totals	4,783,796				10,273,555	10,273,555
W34600	METERS		1961	576	350.0	57.0	6.1404	3,536	3,536
W34600	METERS		1962	475	350.0	59.0	5.9322	2,817	2,817
W34600	METERS		1968	42,970	350.0	73.0	4.7945	206,019	206,019
W34600	METERS		1969	75,877	350.0	78.0	4.4872	340,475	340,475
W34600	METERS		1970	153,578	350.0	85.0	4.1176	632,372	632,372

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34600	METERS	1971	158,205	350.0	89.0	3.9326	622,156	622,156
W34600	METERS	1972	138,812	350.0	94.0	3.7234	516,852	516,852
W34600	METERS	1973	114,682	350.0	100.0	3.5000	401,387	401,387
W34600	METERS	1974	158,596	350.0	118.0	2.9661	470,411	470,411
W34600	METERS	1975	1,167	350.0	129.0	2.7132	3,166	3,166
W34600	METERS	1976	725	350.0	137.0	2.5547	1,852	1,852
W34600	METERS	1977	38,542	350.0	151.0	2.3179	89,337	89,337
W34600	METERS	1978	22,650	350.0	162.0	2.1605	48,935	48,935
W34600	METERS	1979	950	350.0	174.0	2.0115	1,910	1,910
W34600	METERS	1980	781	350.0	190.0	1.8421	1,438	1,438
W34600	METERS	1981	3,462	350.0	202.0	1.7327	5,998	5,998
W34600	METERS	1982	6,863	350.0	219.0	1.5982	10,968	10,968
W34600	METERS	1983	15,061	350.0	235.0	1.4894	22,431	22,431
W34600	METERS	1984	8,096	350.0	241.0	1.4523	11,757	11,757
W34600	METERS	1985	15,064	350.0	239.0	1.4644	22,059	22,059
W34600	METERS	1986	20,748	350.0	248.0	1.4113	29,281	29,281
W34600	METERS	1987	4,795	350.0	253.0	1.3834	6,633	6,633
W34600	METERS	1988	4,139	350.0	256.0	1.3672	5,659	5,659
W34600	METERS	1989	2,654	350.0	257.0	1.3619	3,614	3,614
W34600	METERS	1989	152	350.0	261.0	1.3410	204	204
W34600	METERS	1990	19,912	350.0	262.0	1.3359	26,600	26,600
W34600	METERS	1991	8,202	350.0	274.0	1.2774	10,477	10,477
W34600	METERS	1991	656	350.0	276.0	1.2681	833	833
W34600	METERS	1992	60,802	350.0	278.0	1.2590	76,549	76,549
W34600	METERS	1992	3,184	350.0	283.0	1.2367	3,938	3,938
W34600	METERS	1993	99,149	350.0	292.0	1.1986	118,840	118,840
W34600	METERS	1993	33,930	350.0	295.0	1.1864	40,255	40,255

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34600	METERS		1994	129,135	350.0	304.0	1.1513	148,673	148,673
W34600	METERS		1994	387	350.0	297.0	1.1785	456	456
W34600	METERS		1995	41,393	350.0	303.0	1.1551	47,813	47,813
W34600	METERS		1995	860,095	350.0	303.0	1.1551	993,496	993,496
W34600	METERS		1996	261,924	350.0	318.0	1.1006	288,274	288,274
W34600	METERS		1997	132,763	350.0	322.0	1.0870	144,313	144,313
W34600	METERS		1998	600	350.0	325.0	1.0769	646	646
W34600	METERS		1998	8,480	350.0	322.0	1.0870	9,218	9,218
W34600	METERS		1999	126,344	350.0	329.0	1.0638	134,405	134,405
W34600	METERS		1999	132,471	350.0	332.0	1.0542	139,651	139,651
W34600	METERS		2000	95,879	350.0	339.0	1.0324	98,985	98,985
W34600	METERS		2001	39,525	350.0	348.0	1.0057	39,751	39,751
W34600	METERS		2001	187,581	350.0	350.0	1.0000	187,581	187,581
		W34600	Class Totals	3,232,044				5,972,046	5,972,046
W34800	HYDRANTS		1965	1,549	527.0	63.0	8.3651	12,957	12,957
W34800	HYDRANTS		1966	41,384	527.0	65.0	8.1077	335,529	335,529
W34800	HYDRANTS		1967	18,072	527.0	68.0	7.7500	140,058	140,058
W34800	HYDRANTS		1968	27,195	527.0	72.0	7.3194	199,051	199,051
W34800	HYDRANTS		1969	43,102	527.0	76.0	6.9342	298,877	298,877
W34800	HYDRANTS		1970	114,857	527.0	84.0	6.2738	720,589	720,589
W34800	HYDRANTS		1971	140,746	527.0	91.0	5.7912	815,088	815,088
W34800	HYDRANTS		1972	72,100	527.0	95.0	5.5474	399,967	399,967
W34800	HYDRANTS		1973	31,052	527.0	100.0	5.2700	163,644	163,644
W34800	HYDRANTS		1974	86,586	527.0	126.0	4.1825	362,145	362,145

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34800	HYDRANTS	1975	62,958	527.0	150.0	3.5133	221,191	221,191
W34800	HYDRANTS	1976	73,081	527.0	164.0	3.2134	234,838	234,838
W34800	HYDRANTS	1977	116,348	527.0	175.0	3.0114	350,370	350,370
W34800	HYDRANTS	1978	94,389	527.0	192.0	2.7448	259,078	259,078
W34800	HYDRANTS	1979	13,633	527.0	206.0	2.5583	34,877	34,877
W34800	HYDRANTS	1980	4,607	527.0	220.0	2.3955	11,036	11,036
W34800	HYDRANTS	1981	1,557	527.0	235.0	2.2426	3,491	3,491
W34800	HYDRANTS	1982	19,671	527.0	260.0	2.0269	39,871	39,871
W34800	HYDRANTS	1983	51,619	527.0	278.0	1.8957	97,854	97,854
W34800	HYDRANTS	1984	23,478	527.0	280.0	1.8821	44,187	44,187
W34800	HYDRANTS	1985	48,913	527.0	287.0	1.8362	89,814	89,814
W34800	HYDRANTS	1986	57,394	527.0	297.0	1.7744	101,840	101,840
W34800	HYDRANTS	1987	14,547	527.0	309.0	1.7055	24,810	24,810
W34800	HYDRANTS	1989	1,733	527.0	328.0	1.6067	2,785	2,785
W34800	HYDRANTS	1989	10,153	527.0	338.0	1.5592	15,831	15,831
W34800	HYDRANTS	1990	15,811	527.0	349.0	1.5100	23,875	23,875
W34800	HYDRANTS	1990	7,024	527.0	354.0	1.4887	10,458	10,458
W34800	HYDRANTS	1991	2,049	527.0	359.0	1.4680	3,008	3,008
W34800	HYDRANTS	1992	1,575	527.0	359.0	1.4680	2,312	2,312
W34800	HYDRANTS	1992	7,029	527.0	361.0	1.4598	10,261	10,261
W34800	HYDRANTS	1993	6,340	527.0	366.0	1.4399	9,129	9,129
W34800	HYDRANTS	1993	92,172	527.0	368.0	1.4321	132,000	132,000
W34800	HYDRANTS	1994	20,420	527.0	373.0	1.4129	28,851	28,851
W34800	HYDRANTS	1995	6,245	527.0	373.0	1.4129	8,824	8,824
W34800	HYDRANTS	1995	4,100	527.0	373.0	1.4129	5,793	5,793
W34800	HYDRANTS	1996	37,133	527.0	377.0	1.3979	51,908	51,908
W34800	HYDRANTS	1996	79,144	527.0	379.0	1.3905	110,050	110,050

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34800	HYDRANTS		1997	5,408	527.0	442.0	1.1923	6,448	6,448
W34800	HYDRANTS		1997	15,821	527.0	453.0	1.1634	18,407	18,407
W34800	HYDRANTS		1998	34,443	527.0	467.0	1.1285	38,869	38,869
W34800	HYDRANTS		1998	61,261	527.0	466.0	1.1309	69,281	69,281
W34800	HYDRANTS		1999	28,561	527.0	482.0	1.0934	31,229	31,229
W34800	HYDRANTS		1999	102,850	527.0	484.0	1.0888	111,983	111,983
W34800	HYDRANTS		2000	43,880	527.0	498.0	1.0582	46,434	46,434
W34800	HYDRANTS		2001	6,767	527.0	515.0	1.0233	6,925	6,925
W34800	HYDRANTS		2001	49,139	527.0	527.0	1.0000	49,139	49,139
		W34800	Class Totals	1,797,908				5,754,980	5,754,980
W34900	OTH TRANS/DISTR PLNT		1979	523	324.0	193.0	1.6788	878	878
		W34900	Class Totals	523				878	878
W38900	LAND/LAND RIGHTS		1971	2,125	180.2	39.5	4.5620	9,694	2,125
		W38900	Class Totals	2,125				9,694	2,125
W39000	MISC STRUCTURES		1971	162,295	350.0	88.0	3.9773	645,495	645,495
W39000	MISC STRUCTURES		1973	1,048	350.0	100.0	3.5000	3,668	3,668
W39000	MISC STRUCTURES		1975	39,506	350.0	136.0	2.5735	101,668	101,668
W39000	MISC STRUCTURES		1976	12,442	350.0	140.0	2.5000	31,105	31,105
W39000	MISC STRUCTURES		1977	1,968	350.0	149.0	2.3490	4,622	4,622

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39000	MISC STRUCTURES	1980	8,588	350.0	207.0	1.6908	14,520	14,520
W39000	MISC STRUCTURES	1981	25,091	350.0	220.0	1.5909	39,917	39,917
W39000	MISC STRUCTURES	1982	1,433	350.0	226.0	1.5487	2,219	2,219
W39000	MISC STRUCTURES	1983	506	350.0	233.0	1.5021	760	760
W39000	MISC STRUCTURES	1986	123,898	350.0	246.0	1.4228	176,282	176,282
W39000	MISC STRUCTURES	1987	10,337	350.0	249.0	1.4056	14,529	14,529
W39000	MISC STRUCTURES	1988	6,567	350.0	249.0	1.4056	9,230	9,230
W39000	MISC STRUCTURES	1990	674,080	350.0	262.0	1.3359	900,504	900,504
W39000	MISC STRUCTURES	1991	35,330	350.0	260.0	1.3462	47,561	47,561
W39000	MISC STRUCTURES	1992	290	350.0	259.0	1.3514	393	393
W39000	MISC STRUCTURES	1993	4,890	350.0	274.0	1.2774	6,246	6,246
W39000	MISC STRUCTURES	1993	54,459	350.0	277.0	1.2635	68,810	68,810
W39000	MISC STRUCTURES	1994	24,439	350.0	291.0	1.2027	29,392	29,392
W39000	MISC STRUCTURES	1995	21,953	350.0	298.0	1.1745	25,784	25,784
W39000	MISC STRUCTURES	1996	69,451	350.0	303.0	1.1551	80,223	80,223
W39000	MISC STRUCTURES	1996	1,000	350.0	308.0	1.1364	1,137	1,137
W39000	MISC STRUCTURES	2001	9,388	350.0	350.0	1.0000	9,388	9,388
	W39000	Class Totals	1,288,963				2,213,461	2,213,461
W39100	OFFICE FURN/EQUIP	1969	148	180.2	36.3	4.9642	734	734
W39100	OFFICE FURN/EQUIP	1971	6,713	180.2	39.5	4.5620	30,624	30,624
W39100	OFFICE FURN/EQUIP	1972	2,583	180.2	40.8	4.4167	11,408	11,408
W39100	OFFICE FURN/EQUIP	1974	4,804	180.2	47.7	3.7778	18,148	18,148
W39100	OFFICE FURN/EQUIP	1975	12,623	180.2	52.6	3.4259	43,245	43,245
W39100	OFFICE FURN/EQUIP	1976	49	180.2	55.8	3.2294	158	158

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39100	OFFICE FURN/EQUIP	1977	1,563	180.2	59.9	3.0083	4,701	4,701
W39100	OFFICE FURN/EQUIP	1978	293	180.2	65.0	2.7723	812	812
W39100	OFFICE FURN/EQUIP	1979	74	180.2	72.6	2.4821	183	183
W39100	OFFICE FURN/EQUIP	1980	1,142	180.2	83.3	2.1633	2,470	2,470
W39100	OFFICE FURN/EQUIP	1981	1,076	180.2	91.9	1.9608	2,109	2,109
W39100	OFFICE FURN/EQUIP	1982	164	180.2	97.4	1.8501	303	303
W39100	OFFICE FURN/EQUIP	1983	1,947	180.2	99.0	1.8202	3,543	3,543
W39100	OFFICE FURN/EQUIP	1984	3,392	180.2	103.6	1.7394	5,900	5,900
W39100	OFFICE FURN/EQUIP	1985	10,373	180.2	108.0	1.6685	17,307	17,307
W39100	OFFICE FURN/EQUIP	1986	15,267	180.2	109.8	1.6412	25,056	25,056
W39100	OFFICE FURN/EQUIP	1987	3,188	180.2	113.2	1.5919	5,074	5,074
W39100	OFFICE FURN/EQUIP	1988	3,795	180.2	117.7	1.5310	5,810	5,810
W39100	OFFICE FURN/EQUIP	1989	12,387	180.2	123.3	1.4615	18,104	18,104
W39100	OFFICE FURN/EQUIP	1989	1,476	180.2	123.3	1.4615	2,157	2,157
W39100	OFFICE FURN/EQUIP	1990	70,087	180.2	129.4	1.3926	97,603	97,603
W39100	OFFICE FURN/EQUIP	1990	1,107	180.2	129.4	1.3926	1,541	1,541
W39100	OFFICE FURN/EQUIP	1991	26,927	180.2	136.2	1.3231	35,627	35,627
W39100	OFFICE FURN/EQUIP	1991	5,490	180.2	136.2	1.3231	7,263	7,263
W39100	OFFICE FURN/EQUIP	1992	29,877	180.2	141.0	1.2780	38,183	38,183
W39100	OFFICE FURN/EQUIP	1993	38,262	180.2	145.5	1.2385	47,388	47,388
W39100	OFFICE FURN/EQUIP	1993	91,873	180.2	145.5	1.2385	113,785	113,785
W39100	OFFICE FURN/EQUIP	1994	47,629	180.2	148.7	1.2118	57,717	57,717
W39100	OFFICE FURN/EQUIP	1994	5,775	180.2	148.7	1.2118	6,998	6,998
W39100	OFFICE FURN/EQUIP	1995	1,315	180.2	152.2	1.1840	1,556	1,556
W39100	OFFICE FURN/EQUIP	1995	42,872	180.2	152.2	1.1840	50,760	50,760
W39100	OFFICE FURN/EQUIP	1996	49,567	180.2	156.6	1.1507	57,036	57,036
W39100	OFFICE FURN/EQUIP	1996	13,229	180.2	156.6	1.1507	15,223	15,223

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39100	OFFICE FURN/EQUIP		1997	6,735	180.2	160.6	1.1220	7,557	7,557
W39100	OFFICE FURN/EQUIP		1997	22,818	180.2	160.6	1.1220	25,602	25,602
W39100	OFFICE FURN/EQUIP		1998	7,545	180.2	163.6	1.1015	8,310	8,310
W39100	OFFICE FURN/EQUIP		1998	35,692	180.2	163.6	1.1015	39,314	39,314
W39100	OFFICE FURN/EQUIP		1999	22,336	180.2	167.8	1.0739	23,987	23,987
W39100	OFFICE FURN/EQUIP		2001	2,404	180.2	180.2	1.0000	2,404	2,404
	W39100	Class Totals		604,604				835,721	835,721
W39110	COMPUTER EQUIPMENT		1993	23,177	180.2	145.5	1.2385	28,705	28,705
W39110	COMPUTER EQUIPMENT		1995	3,032	180.2	152.2	1.1840	3,589	3,589
W39110	COMPUTER EQUIPMENT		1995	30,761	180.2	152.2	1.1840	36,421	36,421
W39110	COMPUTER EQUIPMENT		1996	25,576	180.2	156.6	1.1507	29,431	29,431
W39110	COMPUTER EQUIPMENT		1996	89,888	180.2	156.6	1.1507	103,434	103,434
W39110	COMPUTER EQUIPMENT		1997	37,841	180.2	160.6	1.1220	42,458	42,458
W39110	COMPUTER EQUIPMENT		1997	89,734	180.2	160.6	1.1220	100,682	100,682
W39110	COMPUTER EQUIPMENT		1998	34,404	180.2	163.6	1.1015	37,896	37,896
W39110	COMPUTER EQUIPMENT		1998	35,824	180.2	163.6	1.1015	39,460	39,460
W39110	COMPUTER EQUIPMENT		1999	124,877	180.2	167.8	1.0739	134,105	134,105
W39110	COMPUTER EQUIPMENT		2000	78,376	180.2	173.1	1.0410	81,590	81,590
W39110	COMPUTER EQUIPMENT		2001	11,210	180.2	180.2	1.0000	11,210	11,210
W39110	COMPUTER EQUIPMENT		2001	55,722	180.2	180.2	1.0000	55,722	55,722
	W39110	Class Totals		640,427				704,708	704,708
W39200	TRANSPORT EQUIP		1978	780	180.2	65.0	2.7723	2,162	2,162

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39200	TRANSPORT EQUIP		1981	1,484	180.2	91.9	1.9608	2,909	2,909
W39200	TRANSPORT EQUIP		1986	304	180.2	109.8	1.6412	499	499
W39200	TRANSPORT EQUIP		1989	1,378	180.2	123.3	1.4615	2,013	2,013
W39200	TRANSPORT EQUIP		1990	16,461	180.2	129.4	1.3926	22,923	22,923
W39200	TRANSPORT EQUIP		1991	2,428	180.2	136.2	1.3231	3,212	3,212
W39200	TRANSPORT EQUIP		1992	3,125	180.2	141.0	1.2780	3,994	3,994
W39200	TRANSPORT EQUIP		1993	25,625	180.2	145.5	1.2385	31,737	31,737
W39200	TRANSPORT EQUIP		1994	39,474	180.2	148.7	1.2118	47,834	47,834
W39200	TRANSPORT EQUIP		1995	72,026	180.2	152.2	1.1840	85,278	85,278
W39200	TRANSPORT EQUIP		1996	8,890	180.2	156.6	1.1507	10,230	10,230
W39200	TRANSPORT EQUIP		1996	41,442	180.2	156.6	1.1507	47,687	47,687
W39200	TRANSPORT EQUIP		1997	195,280	180.2	160.6	1.1220	219,104	219,104
W39200	TRANSPORT EQUIP		1998	1,431	180.2	163.6	1.1015	1,576	1,576
W39200	TRANSPORT EQUIP		1999	111,254	180.2	167.8	1.0739	119,476	119,476
W39200	TRANSPORT EQUIP		1999	30,312	180.2	167.8	1.0739	32,553	32,553
W39200	TRANSPORT EQUIP		2000	53,438	180.2	173.1	1.0410	55,629	55,629
W39200	TRANSPORT EQUIP		2001	125,437	180.2	180.2	1.0000	125,437	125,437
W39200	TRANSPORT EQUIP		2001	75,925	180.2	180.2	1.0000	75,925	75,925
	W39200	Class Totals		806,500				890,188	890,188
W39300	STORES EQUIPMENT		1981	1,000	180.2	91.9	1.9608	1,960	1,960
W39300	STORES EQUIPMENT		1987	2,393	180.2	113.2	1.5919	3,809	3,809
W39300	STORES EQUIPMENT		1988	473	180.2	117.7	1.5310	724	724
W39300	STORES EQUIPMENT		1990	8,694	180.2	129.4	1.3926	12,107	12,107
W39300	STORES EQUIPMENT		1992	180	180.2	141.0	1.2780	230	230

Company Code: 4003 Business Area: 4504 Sun City Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39300	STORES EQUIPMENT	1993	716	180.2	145.5	1.2385	887	887
W39300	STORES EQUIPMENT	1994	95	180.2	148.7	1.2118	115	115
	W39300 Class Totals		13,552				19,836	19,836
W39400	TOOLS AND WORK EQUIP	1975	1,257	180.2	52.6	3.4259	4,306	4,306
W39400	TOOLS AND WORK EQUIP	1976	346	180.2	55.8	3.2294	1,117	1,117
W39400	TOOLS AND WORK EQUIP	1977	663	180.2	59.9	3.0083	1,994	1,994
W39400	TOOLS AND WORK EQUIP	1979	7,047	180.2	72.6	2.4821	17,491	17,491
W39400	TOOLS AND WORK EQUIP	1980	267	180.2	83.3	2.1633	577	577
W39400	TOOLS AND WORK EQUIP	1981	1,224	180.2	91.9	1.9608	2,400	2,400
W39400	TOOLS AND WORK EQUIP	1984	365	180.2	103.6	1.7394	635	635
W39400	TOOLS AND WORK EQUIP	1985	1,420	180.2	108.0	1.6685	2,369	2,369
W39400	TOOLS AND WORK EQUIP	1986	1,678	180.2	109.8	1.6412	2,753	2,753
W39400	TOOLS AND WORK EQUIP	1987	3,553	180.2	113.2	1.5919	5,656	5,656
W39400	TOOLS AND WORK EQUIP	1988	2,533	180.2	117.7	1.5310	3,879	3,879
W39400	TOOLS AND WORK EQUIP	1988	2,021	180.2	117.7	1.5310	3,094	3,094
W39400	TOOLS AND WORK EQUIP	1989	8,965	180.2	123.3	1.4615	13,103	13,103
W39400	TOOLS AND WORK EQUIP	1990	11,444	180.2	129.4	1.3926	15,937	15,937
W39400	TOOLS AND WORK EQUIP	1990	9,173	180.2	129.4	1.3926	12,774	12,774
W39400	TOOLS AND WORK EQUIP	1991	3,332	180.2	136.2	1.3231	4,409	4,409
W39400	TOOLS AND WORK EQUIP	1991	1,016	180.2	136.2	1.3231	1,344	1,344
W39400	TOOLS AND WORK EQUIP	1992	6,022	180.2	141.0	1.2780	7,696	7,696
W39400	TOOLS AND WORK EQUIP	1993	9,561	180.2	145.5	1.2385	11,842	11,842
W39400	TOOLS AND WORK EQUIP	1993	2,479	180.2	145.5	1.2385	3,070	3,070
W39400	TOOLS AND WORK EQUIP	1994	12,342	180.2	148.7	1.2118	14,956	14,956

Company Code: 4003 Business Area: 4504 Sun City Water

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39400	TOOLS AND WORK EQUIP		1995	1,225	180.2	152.2	1.1840	1,451	1,451
W39400	TOOLS AND WORK EQUIP		1995	16,753	180.2	152.2	1.1840	19,835	19,835
W39400	TOOLS AND WORK EQUIP		1996	1,849	180.2	156.6	1.1507	2,127	2,127
W39400	TOOLS AND WORK EQUIP		1996	32,647	180.2	156.6	1.1507	37,567	37,567
W39400	TOOLS AND WORK EQUIP		1997	2,406	180.2	160.6	1.1220	2,699	2,699
W39400	TOOLS AND WORK EQUIP		1997	28,822	180.2	160.6	1.1220	32,338	32,338
W39400	TOOLS AND WORK EQUIP		1998	8,480	180.2	163.6	1.1015	9,341	9,341
W39400	TOOLS AND WORK EQUIP		1998	17,971	180.2	163.6	1.1015	19,795	19,795
W39400	TOOLS AND WORK EQUIP		1999	14,896	180.2	167.8	1.0739	15,997	15,997
W39400	TOOLS AND WORK EQUIP		2000	2,302	180.2	173.1	1.0410	2,397	2,397
W39400	TOOLS AND WORK EQUIP		2001	9,166	180.2	180.2	1.0000	9,166	9,166
		W39400	Class Totals	223,235				284,130	284,130
W39500	LAB EQUIP		1987	1,649	180.2	113.2	1.5919	2,625	2,625
W39500	LAB EQUIP		1988	791	180.2	117.7	1.5310	1,212	1,212
W39500	LAB EQUIP		1989	673	180.2	123.3	1.4615	984	984
W39500	LAB EQUIP		1992	795	180.2	141.0	1.2780	1,016	1,016
W39500	LAB EQUIP		1993	2,289	180.2	145.5	1.2385	2,835	2,835
W39500	LAB EQUIP		1994	1,400	180.2	148.7	1.2118	1,697	1,697
W39500	LAB EQUIP		1995	961	180.2	152.2	1.1840	1,137	1,137
W39500	LAB EQUIP		1996	107	180.2	156.6	1.1507	123	123
W39500	LAB EQUIP		1997	243	180.2	160.6	1.1220	273	273
W39500	LAB EQUIP		1998	319	180.2	163.6	1.1015	352	352
W39500	LAB EQUIP		1999	327	180.2	167.8	1.0739	352	352

	W39500	Class Totals	9,560				12,611	12,611
W39600	PWR OPER EQUIP	1979	9,138	180.2	72.6	2.4821	22,681	22,681
W39600	PWR OPER EQUIP	1980	1,134	180.2	83.3	2.1633	2,453	2,453
W39600	PWR OPER EQUIP	1981	1,442	180.2	91.9	1.9608	2,827	2,827
W39600	PWR OPER EQUIP	1988	2,239	180.2	117.7	1.5310	3,428	3,428
W39600	PWR OPER EQUIP	1989	5,076	180.2	123.3	1.4615	7,418	7,418
W39600	PWR OPER EQUIP	1990	3,198	180.2	129.4	1.3926	4,453	4,453
W39600	PWR OPER EQUIP	1991	671	180.2	136.2	1.3231	888	888
W39600	PWR OPER EQUIP	1992	1,860	180.2	141.0	1.2780	2,377	2,377
W39600	PWR OPER EQUIP	1992	2,651	180.2	141.0	1.2780	3,387	3,387
W39600	PWR OPER EQUIP	1995	21,702	180.2	152.2	1.1840	25,695	25,695
W39600	PWR OPER EQUIP	1997	163	180.2	160.6	1.1220	183	183
W39600	PWR OPER EQUIP	1999	28,408	180.2	167.8	1.0739	30,507	30,507
	W39600	Class Totals	77,684				106,303	106,303
W39700	COMM EQUIP	1985	4,182	180.2	108.0	1.6685	6,977	6,977
W39700	COMM EQUIP	1987	2,397	180.2	113.2	1.5919	3,815	3,815
W39700	COMM EQUIP	1988	501	180.2	117.7	1.5310	767	767
W39700	COMM EQUIP	1988	296	180.2	117.7	1.5310	453	453
W39700	COMM EQUIP	1989	49,276	180.2	123.3	1.4615	72,018	72,018
W39700	COMM EQUIP	1990	25,507	180.2	129.4	1.3926	35,521	35,521
W39700	COMM EQUIP	1991	5,800	180.2	136.2	1.3231	7,673	7,673
W39700	COMM EQUIP	1992	2,469	180.2	141.0	1.2780	3,155	3,155
W39700	COMM EQUIP	1993	12,096	180.2	145.5	1.2385	14,981	14,981
W39700	COMM EQUIP	1993	20,776	180.2	145.5	1.2385	25,731	25,731
W39700	COMM EQUIP	1994	8,167	180.2	148.7	1.2118	9,897	9,897

Company Code: 4003 Business Area: 4504 Sun City Water

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39700	COMM EQUIP		1995	934	180.2	152.2	1.1840	1,105	1,105
W39700	COMM EQUIP		1995	24,066	180.2	152.2	1.1840	28,495	28,495
W39700	COMM EQUIP		1996	6,528	180.2	156.6	1.1507	7,512	7,512
W39700	COMM EQUIP		1997	10,347	180.2	160.6	1.1220	11,610	11,610
W39700	COMM EQUIP		1998	28,638	180.2	163.6	1.1015	31,545	31,545
W39700	COMM EQUIP		1999	19,467	180.2	167.8	1.0739	20,906	20,906
		W39700	Class Totals	221,453				282,169	282,169
W39800	MISC EQUIP		1975	14,275	180.2	52.6	3.4259	48,904	48,904
W39800	MISC EQUIP		1976	1,236	180.2	55.8	3.2294	3,991	3,991
W39800	MISC EQUIP		1977	546	180.2	59.9	3.0083	1,642	1,642
W39800	MISC EQUIP		1978	340	180.2	65.0	2.7723	942	942
W39800	MISC EQUIP		1979	1,109	180.2	72.6	2.4821	2,752	2,752
W39800	MISC EQUIP		1980	1,539	180.2	83.3	2.1633	3,329	3,329
W39800	MISC EQUIP		1981	271	180.2	91.9	1.9608	531	531
W39800	MISC EQUIP		1983	125	180.2	99.0	1.8202	227	227
W39800	MISC EQUIP		1985	3,045	180.2	108.0	1.6685	5,080	5,080
W39800	MISC EQUIP		1986	688	180.2	109.8	1.6412	1,129	1,129
W39800	MISC EQUIP		1987	1,184	180.2	113.2	1.5919	1,884	1,884
W39800	MISC EQUIP		1988	2,036	180.2	117.7	1.5310	3,118	3,118
W39800	MISC EQUIP		1988	1,590	180.2	117.7	1.5310	2,434	2,434
W39800	MISC EQUIP		1989	1,336	180.2	123.3	1.4615	1,953	1,953
W39800	MISC EQUIP		1990	3,192	180.2	129.4	1.3926	4,445	4,445
W39800	MISC EQUIP		1991	24,851	180.2	136.2	1.3231	32,881	32,881
W39800	MISC EQUIP		1992	528	180.2	141.0	1.2780	675	675

Company Code: 4003 Business Area: 4504 Sun City Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39800	MISC EQUIP	1993	1,618	180.2	145.5	1.2385	2,004	2,004
W39800	MISC EQUIP	1994	519	180.2	148.7	1.2118	629	629
W39800	MISC EQUIP	1995	1,397	180.2	152.2	1.1840	1,654	1,654
W39800	MISC EQUIP	1996	442	180.2	156.6	1.1507	509	509
W39800	MISC EQUIP	1997	1,653	180.2	160.6	1.1220	1,855	1,855
W39800	MISC EQUIP	1998	183	180.2	163.6	1.1015	202	202
W39800	MISC EQUIP	1999	280	180.2	167.8	1.0739	301	301
W39800	MISC EQUIP	1999	3,657	180.2	167.8	1.0739	3,927	3,927
W39800	MISC EQUIP	2000	1,993	180.2	173.1	1.0410	2,074	2,074
W39800	MISC EQUIP	2001	2,120	180.2	180.2	1.0000	2,120	2,120
W39800	MISC EQUIP	2001	3,673	180.2	180.2	1.0000	3,673	3,673
	W39800 Class Totals		75,435				134,879	134,879
Company Code: 4003	Business Area: 4504		37,978,137				81,868,482	81,526,331

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 1
Witness: Bourassa

Line No.		Direct Test Year Adjusted Results	Label	Adjustment	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	**Revenues**						
2	Metered Water Revenues	$ 6,079,671			$ 6,079,671	4,364,140	$ 10,443,811
3	Unmetered Water Revenues	-			-		-
4	Other Water Revenues	113,419			113,419		113,419
5		$ 6,193,090		$ -	$ 6,193,090	$ 4,364,140	$ 10,557,230
6	**Operating Expenses**						
7	Salaries and Wages	$ 1,167,073	1/6	(170,260)	$ 996,813		$ 996,813
8	Purchased Water	-			-		-
9	Purchased Power	1,416,410			1,416,410		1,416,410
10	Chemicals	17,413			17,413		17,413
11	Repairs and Maintenance	540,349			540,349		540,349
12	Office Supplies and Expense	483,141	7	(66,552)	416,589		416,589
13	Outside Services	93,641			93,641		93,641
14	Service Company Charges	926,122	10	(30,953)	895,168		895,168
15	Water Testing	6,878			6,878		6,878
16	Rents	28,369			28,369		28,369
17	Transportation Expenses	22			22		22
18	Insurance - General Liability	87,848	8	(8,261)	79,587		79,587
19	Insurance - health and Life	-			-		-
20	Regulatory Commission Expense - Rate Case	40,874			40,874		40,874
21	Miscellaneous Expense	300,122	9	343	300,465		300,465
22	Depreciation Expense	1,025,028	3	(17,336)	1,007,693		1,007,693
23	Taxes Other Than Income	62,065	2	688	62,753		62,753
24	Property Taxes	186,779	4		186,779		186,779
25	Income Tax	(665,050)		120,261	(544,789)		1,139,720
26					-		-
27	**Total Operating Expenses**	$ 5,717,083		$ (172,070)	$ 5,545,013	$ -	$ 7,229,522
28	**Operating Income**	$ 476,007		$ 172,070	$ 648,077	$ 4,364,140	$ 3,327,708
29	**Other Income (Expense)**						
30	Interest Income	-			-		-
31	Other income	-			-		-
32	Interest Expense	(1,533,935)	5	19,235	(1,514,700)		(1,514,700)
33	Other Expense	-			-		-
34	Gain/Loss Sale of Fixed Assets	-			-		-
35	**Total Other Income (Expense)**	$ (1,533,935)		$ 19,235	$ (1,514,700)	$ -	$ (1,514,700)
36	**Net Profit (Loss)**	$ (1,057,928)		$ 191,306	$ (866,622)	$ 4,364,140	$ 1,813,008
37							
38	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
39	Rebuttal C-2				Rebuttal A-1		
40							
41							

Arizona American
Summary of Rebuttal Adjustments
Test Year December 31, 2001

Exhibit
Rebuttal Schedule C-2
Witness: Bourassa
Page1

	Water/ Sewer Label	Description	Sun City Water
Revenues			
Revenues		None	
Other Revenues		None	
			$ -
Operating Expenses			
Salaries and Wages	1	Adjust to Actual 2002 Wages	$ 35,339
	6	Adjust to Actual 2002 Additional (Corporate)	(205,598)
Purchased Water	11	Adjust to annualized 2001 qty ordered	
Purchased Wastewater Treatment		None	
Purchased Power		None	
Fuel for Power Production			
Chemicals		None	
Materials ans Supplies		None	
Repairs and Maintenance		None	
Office Supplies and Expense	7	Adjust to Actual 2002 Additional (Corporate)	(66,552)
Outside Services			
Service Company Charges	10	Adjust to Actual 2002 Service Company Charges	(30,953)
Water Testing		None	
Rents		None	
Transportation Expenses			
Insurance - General Liability	8	Adjust to Actual 2002 Additional (Corporate)	(8,261)
Insurance - Health and Life		None	
Rate Case Expense		None	
Miscellaneous Expense	9	Adjust to Actual 2002 Additional (Corporate)	343
Depreciation Expense	3	Depreciation Expense	(17,336)
Taxes Other Than Income	2	Adjust to 2002 PR Tax based on Actual Wages	688
Property Taxes	4	Property Taxes	-
Income Tax			120,261
Tolleson Wastewater User Fees		None	
Total Operating Expenses			$ (172,070)
Operating Income			$ 172,070

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line No.			Amount
1	Projected Salaries & Wages and Related Expenses		
2			
3	Actual 2002 Wages and Salaries		
4	601	Salaries & Wages	$ 769,786
5			
6	Direct Filing Proposed Wages and Salaries		
7	601	Salaries & Wages	$ 734,448
8			
9	Increase (Decrease)		$ 35,339
10			
11	Adjustment to Revenues and/or Expenses		$ 35,339
12			
13			
14			
15			

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line No.			Amount
1	Projected Salaries & Wages and Related Expenses		
2			
3	PR Taxes Based on Actual 2002 Wages and Salaries		
4	408	Taxes Other Than Income	62,753
5			
6	Direct Filing Proposed PR Taxes		
7	408	Taxes Other Than Income	62,065
8			
9	Increase (Decrease)		$ 688
10			
11	Adjustment to Revenues and/or Expenses		$ 688
12			
13			
14			
15			

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Depreciation Expense

Line No.	Account No.	Description	Rebuttak Original Cost	Rate	Depreciation Expense
5		**Intangible**			
6	301.00	Organization	$ 471	0.00%	$ -
7	302.00	Franchises	2,851	0.00%	-
8	303.00	Miscellaneous Intangibles	4,591	0.00%	-
9		**Subtotal Intangible**	$ 7,913		$ -
10					
11		**Source of Supply**			
12	310.00	Land and Land Rights	$ 180,083	0.00%	$ -
13	311.00	Structures and Improvements	875,244	2.50%	21,881
14	312.00	Collecting and Impounding Res.	314	2.50%	8
15	313.00	Lakes, Rivers, Other Intakes	-	0.00%	-
16	314.00	Wells and Springs	1,891,544	2.52%	47,667
17		**Subtotal Source of Supply**	$ 2,947,185		$ 69,556
18					
19		**Pumping**			
20	320.00	Land and Land Rights	$ 8,456	0.00%	$ -
21	321.00	Structures and Improvements	582,491	1.67%	9,728
22	323.00	Other Power Production	9,554	4.42%	422
23	325.00	Electric Pumping Equipment	6,668,795	4.42%	294,761
24	326.00	Diesel Pumping Equipment	25,151	5.00%	1,258
25	328.10	Gas Engine Pumping Equipment	249,781	5.01%	12,514
26		**Subtotal Pumping**	$ 7,544,228		$ 318,682
27					
28		**Water Treatment**			
29	330.00	Land and Land Rights	$ -	0.00%	$ -
30	331.00	Structures and Improvements	80,580	1.67%	1,346
31	332.00	Water Treatment Equipment	393,191	4.00%	15,728
32		**Subtotal Water Treatment**	$ 473,771		$ 17,073
33					
34		**Transmission and Distribution**			
35	340.00	Land and Land Rights	$ 10,493	0.00%	$ -
36	341.00	Structures and Improvements	28,604	2.00%	572
37	342.00	Distribution, Reservoirs, & ST	1,512,510	1.67%	25,259
38	343.00	Transmission and Distribution	14,034,103	1.53%	214,722
39	344.00	Fire Mains	-	0.00%	-
40	345.00	Services	4,783,796	2.48%	118,638
41	346.00	Meters	3,232,044	2.51%	81,124
42	348.00	Hydrants	1,814,681	2.00%	36,294
43	349.00	Other Transmission & Distribution	523	2.00%	10
44		**Subtotal Transmission and Distribution**	$ 25,416,754		$ 476,619
45					
46		**General**			
47	389.00	Land and Land Rights	$ 1,163	0.00%	$ -
48	390.00	Structures and Improvements	798,274	1.67%	13,331
49	391.00	Office Funiture and Equipment	502,391	4.59%	23,060
50	391.10	Computer Equipment	227,321	4.59%	10,434
51	392.00	Transportation Equipment	579,346	25.00%	144,837
52	393.00	Stores Equipment	6,848	3.91%	268
53	394.00	Tools, Shop and Garage	97,974	4.02%	3,939
54	395.00	Laboratory Equipment	31,035	3.71%	1,151
55	396.00	Power Operated Equipment	28,520	5.20%	1,483
56	397.00	Communication Equipment	177,800	10.30%	18,313
57	398.00	Miscellaneous Equipment	62,439	4.93%	3,078
58		**Subtotal General**	$ 2,513,111		$ 219,894
59					
60					
61					
62					
63		TOTALS	$ 38,902,962	0.02832	$ 1,101,825
64					
65	Amortization of Deferred Regulatory Assets		$ 655,877	2.8322%	18,576
66					
67	Less: Amotization of Contributions		$ 1,127,078	10.0000%	(112,708)
68	Rebuttal Depreciation Expense				$ 1,007,693
69					
70	Direct Filing Depreciation Expense				1,025,028
71					
72	Increase (decrease) in Depreciation Expense				(17,336)
73					
74	Adjustment to Revenues and/or Expenses				$ (17,336)
75					

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line No.		
1	Adjust Property Taxes to Reflect Proposed Revenues:	
2		
3	Rebuttal Adjusted Revenues in year ended 12/31/01	$ 6,193,090
4	Rebuttal Adjusted Revenues in year ended 12/31/01	6,193,090
5	Proposed Revenues	10,557,230
6	Average of three year's of revenue	$ 7,647,804
7	Average of three year's of revenue, times 2	15,295,607
8	Add:	
9	Construction Work in Progess at 10%	
10	Deduct:	
11	Book Value of Transportation Equipment	579,346
12	Book Value of Transportation Equipment (proforma)	-
13	Total Book Value of Transportation Equipment	$ 579,346
14		
15	Full Cash Value	$ 14,716,261
16	Assessment Ratio	25%
17	Assessed Value	3,679,065
18	Property Tax Rate	7.205292%
19		
20	Property Tax	265,087
21	Tax on Parcels	154
22		
23	Total Rebuttal Property Tax at Proposed Rates	$ 265,241
24	Direct Filing Proposed Property Taxes	284,477
25	Increase (Decrease) in Property Taxes	$ (19,235)
26		
27		
28	Adjustment to Revenues and/or Expenses	$ (19,235)
29		
30		

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line No.		
1	Interest Synchronization with Rate Base	
2		
3	Rebuttal Fair Value Rate Base	$44,279,756
4	Weigted Cost of Debt from Schedule D-1	2.92%
5	Rebuttal Synchronized Interest Expense	1,291,198
6	Direct Filing Interest Expense	1,533,935
7	Increase in Interest Expense	$ (242,737)
8		
9	Adjustment to Revenues and/or Expense	$ (242,737)
10		
11		

Arizona American - Sun City Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
Page 7
Witness: Bourassa

Line No.		
1	Projected Additional Expenses	
2		
3		
4	Actual 2002 Additional Wages Expense (Corporate)	$ 227,027
5		
6	Direct Filing Proposed Additonal Wages Expense (Corporate	432,625
7		
8		
9	Increase (Decrease) in Addtional Expenses	$ (205,598)
10		
11	Adjustment to Revenue and/or Expense	$ (205,598)
12		
13		
14		
15		

Arizona American - Sun City Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

Line No.		
1	Projected Additional Expenses	
2		
3		
4	Actual 2002 Additional Office Expense (Corporate)	$ 274,205
5		
6	Direct Filing Proposed Additonal Office Expense (Corporate)	340,757
7		
8		
9	Increase (Decrease) in Addtional Expenses	$ (66,552)
10		
11	Adjustment to Revenue and/or Expense	$ (66,552)
12		
13		
14		
15		

Arizona American - Sun City Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
Page 9
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Insurance Expense (Corporate)	$	75,891
5			
6	Direct Filing Proposed Additonal Insurance Expense (Corpor		84,152
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(8,261)
10			
11	Adjustment to Revenue and/or Expense	$	(8,261)
12			
13			
14			
15			

Arizona American - Sun City Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 9

Exhibit
Rebuttal Schedule C-2
Page 10
Witness: Bourassa

Line No.			
1	*Projected Additional Expenses*		
2			
3			
4	Actual 2002 Additional Misc. Expense (Corporate)	$	3,788
5			
6	Direct Filing Proposed Additonal Misc. Expense (Corporate)		3,446
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	343
10			
11	Adjustment to Revenue and/or Expense	$	343
12			
13			
14			
15			

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 10

Exhibit
Schedule C-2
Page 11
Witness: Bourassa

Line No.			
1	Service Company Charges		
2			
3	Total 2002 Charges	$ 4,981,460	
4	Allocation Factor (4 factor Formula)	0.1797	
5	Total Charges		$ 895,168
6			
7			
8	Direct Filing Proposed Charges	$ 5,153,711	
9	Allocation Factor (4 factor Formula)	0.1797	
10	Total Charges		926,122
11			
12			
13	Adjustment to Revenues and/or Expenses		$ (30,953)
14			
15			
16			
17			

Arizona American - Sun City Water
Test Year Ended December 31, 2001
Summary of Cost of Capital

Exhibit
Rebuttal Schedule D-1
Page 1
Witness: Stephenson

Line No.	Item of Capital	End of Test Year Percent of Total	(e) Cost Rate	Weighted Cost	End of Projected Year Percent of Total	(e) Cost Rate	Weighted Cost
1	Long-Term Debt	60.00%	4.86%	2.92%	60.00%	4.86%	2.92%
2							
3	Stockholder's Equity (c)	40.00%	11.50%	4.60%	40.00%	11.50%	4.60%
4							
5	Totals	100.00%		7.52%	100.00%		7.52%
6							
7							
8	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							

SUN CITY
WASTEWATER

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

Line No.		
1	Fair Value Rate Base	$ 17,192,669
2		
3	Adjusted Operating Income	1,097,877
4		
5	Current Rate of Return	6.39%
6		
7	Required Operating Income	$ 1,292,201
8		
9	Required Rate of Return on Fair Value Rate Base	7.52%
10		
11	Operating Income Deficiency	$ 194,324
12		
13	Gross Revenue Conversion Factor	1.6286
14		
15	Increase in Gross Revenue	
16	Requirement	$ 316,482

	Customer Classification	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
20	Residential Units (SSR)	$ 2,920,525	$ 3,102,065	$ 181,540	6.22%
21	Commercial/Residential Units (SSR)	116	123	7	6.22%
22	Commercial (SSC)	104,865	111,377	6,512	6.21%
23	Commercial Large User (SS6)	64,965	69,153	4,188	6.45%
24	Multi-family Residential Units (AC SSR)	1,793,100	1,904,559	111,459	6.22%
25	Commercial additional toilets (SS1)	133,438	141,910	8,472	6.35%
26	Commercial per dishwasher (SS2)	26,568	28,221	1,653	6.22%
27	Commercial per wash machine (SS3)	5,457	5,790	332	6.09%
28	Commercial per wash rack (SS4)	2,736	2,907	171	6.25%
29	Miscellaneous Revenues	2,859	2,859	-	0.00%
30	Subtotal of Revenues	$ 5,054,629	$ 5,368,963	$ 314,334	6.22%
31					
32	Revenue Annualization				
33	Residential Units (SSR)	$ 12,754	$ 13,547	$ 793	6.22%
34	Commercial/Residential Units (SSR)	(116)	(123)	(7)	6.22%
35	Commercial (SSC)	1,809	1,921	112	6.21%
36	Commercial Large User (SS6)	-	-	-	0.00%
37	Multi-family Residential Units (AC SSR)	17,709	18,810	1,101	6.22%
38	Commercial additional toilets (SS1)	329	350	21	6.35%
39	Commercial per dishwasher (SS2)	669	711	42	6.22%
40	Commercial per wash machine (SS3)	49	52	3	6.09%
41	Commercial per wash rack (SS4)	29	31	2	6.25%
42	Total Revenue Annualization	$ 33,233	$ 35,299	$ 2,066	6.22%
43		0	0	0	0
44	Total of Revenues	$ 5,087,862	$ 5,404,262	$ 316,400	6.22%

46 SUPPORTING SCHEDULES:
47 Rebuttal B-1
48 Rebuttal C-1
49 Rebuttal D-1
50 Rebuttal H-1

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Summary of Fair Value Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	RCND Rate base	Fair Value Rate base (RCND Only)
1				
2	Gross Utility Plant in Service	$ 19,900,934	$ 43,537,027	$ 43,537,027
3	Less: Accumulated Depreciation	7,195,117	17,008,200	17,008,200
4				
5	Net Utility Plant in Service	$ 12,705,816	$ 26,528,827	$ 26,528,827
6				
7	Less:			
8	Advances in Aid of			
9	Construction	3,309,005	7,239,070	7,239,070
10	Contributions in Aid of			
11	Construction - Net of amortization	1,187,139	2,597,089	2,597,089
12	Customer Meter Deposits	-	-	-
13	Deferred Income Taxes & Credits	-	-	-
14	Investment tax Credits	-	-	-
15	Plus:			
16	Tolleson Trickling			
17	Filter	500,000	500,000	500,000
18	Deferred Tax Assets	-	-	-
19	Allowance for Working Capital	-	-	-
20	Citizens Acquisition Adjustment	5,224,179	-	-
21				
22	Total Rate Base	$ 13,933,851	$ 17,192,669	$ 17,192,669
23				
24				
25				
26	SUPPORTING SCHEDULES:		RECAP SCHEDULES:	
27	Rebuttal B-2		Rebuttal A-1	
28	Rebuttal B-3			
29				
30				
31				

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 19,962,780	(1)	(61,846)	$ 19,900,934
3					
4					
5	**Less:**				
6	Accumulated				
7	Depreciation	7,189,539	(2)	5,578	7,195,117
8					
9	Net Utility Plant				
10	in Service	$ 12,773,241			$ 12,705,816
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	3,309,005			3,309,005
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	1,187,139			1,187,139
18	Purposes Only)				
19	Customer Meter Deposits	-			-
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Tolleson Trickling				
24	Filter	500,000			500,000
25	Deferred Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	5,264,640	(3)	(40,461)	5,224,179
28					
29	Total	$ 14,041,737			$ 13,933,851
30					
31					
32	(1) See Rebuttal B-2, Page 2				
33	(2) See Rebuttal B-2, Page 3				
34	(3) See Rebuttal B-2, Page 4				
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					

Arizona American - Sun City Wastewater
Plant Summary
at December 31, 2001

Exhibit
Schedule B-2
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 122,373	$ -	$ 122,373	$ -	$ -	$ -
3	302.00	Franchises	6,132	-	6,132	-	-	-
4	303.00	Miscellaneous Intangibles	10,495	(868)	9,627	-	(868)	(868)
5		**Subtotal Intangible**	$ 139,000	$ (868)	$ 138,132	$ -	$ (868)	$ (868)
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 6,565	$ -	$ 6,565	$ -	$ -	$ -
9	311.00	Structures and Improvements	42,195	11,337	53,532	6,372	-	6,372
10	312.00	Preliminary Treatment	453	-	453	63	-	63
11	313.00	Primary Treatment Equipment	-	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	2,575	-	2,575	62	-	62
13	315.00	Tertiary Equipment	-	-	-	-	-	-
14	316.00	Disinfection Equipment	-	-	-	-	-	-
15	317.00	Effluent Lift Station E	1,503	-	1,503	378	-	378
16	318.00	Outfall Line	291	-	291	61	-	61
17	319.00	Sludge, Treatment & Distribution	-	-	-	-	-	-
18	321.00	Influent Lift Station	178	-	178	(8,749)	-	(8,749)
19	322.00	General Treatment Equipment	18,743	-	18,743	(331)	-	(331)
20		**Subtotal Treatment & Discharge**	$ 72,503	$ 11,337	$ 83,840	$ (2,143)	$ -	$ (2,143)
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
24	341.00	Structures and Improvements	350,713	-	350,713	5,455	-	5,455
25	342.00	Collection System Lift	1,229,723	-	1,229,723	419,098	-	419,098
26	343.00	Collection Mains	12,388,680	(4,310)	12,384,369	5,243,502	-	5,243,502
27	344.00	Force Mains	1,300,266	-	1,300,266	70,153	-	70,153
28	345.00	Discharge Services	2,307,454	-	2,307,454	1,098,603	-	1,098,603
29	348.00	Manholes	-	-	-	-	-	-
30		**Subtotal Collection and Influent**	$ 17,576,836	$ (4,310)	$ 17,572,526	$ 6,836,811	$ -	$ 6,836,811
31								
32		**General**						
33	389.00	Land and Land Rights	$ 1,108	$ -	$ 1,108	$ -	$ -	$ -
34	390.00	Structures and Improvements	760,473	-	760,473	70,466	-	70,466
35	391.00	Office Funiture and Equipment	388,328	(23,238)	365,090	83,100	-	83,100
	391.10	Computer Equipment	425,623	(138,038)	287,585	(98,704)	(8,364)	(107,068)
36	392.00	Transportation Equipment	408,123	-	408,123	236,016	-	236,016
37	393.00	Stores Equipment	6,523	-	6,523	1,767	-	1,767
38	394.00	Tools, Shop and Garage	93,334	-	93,334	5,228	-	5,228
39	395.00	Laboratory Equipment	29,565	-	29,565	5,212	-	5,212
40	396.00	Power Operated Equipment	27,321	(152)	27,169	9,721	(84)	9,638
41	397.00	Communication Equipment	160,926	3,785	164,710	75,521	-	75,521
42	398.00	Miscellaneous Equipment	62,919	(3,437)	59,482	29,674	(3,437)	26,237
43		**Subtotal General**	$ 2,364,243	$ (161,080)	$ 2,203,163	$ 418,000	$ (11,884)	$ 406,116
44								
45		Youngtown Plant *	(96,727)	-	(96,727)	(44,798)	-	(44,798)
46		ADEQ adjustment 3/95 **	(93,075)	93,075	-	(18,330)	18,330	-
47		TOTAL WASTEWATER PLANT	$ 19,962,780	$ (61,846)	$ 19,900,933	$ 7,189,539	$ 5,578	$ 7,195,117
48								
49								
50		SUPPORTING SCHEDULES:						
51		Rebuttal B-2, page 2a, 2b, 3a, 3b						
52								
53								

Arizona American
Sun City Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Blank Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 122,373					$ -
3	302.00	Franchises	6,132					-
4	303.00	Miscellaneous Intangibles	10,495		(868)			-
5		**Subtotal Intangible**	$ 139,000	$ -	$ (868)	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 6,565					$ -
9	311.00	Structures and Improvements	42,195					11,337
10	312.00	Preliminary Treatment	453					-
11	313.00	Primary Treatment Equipment	-					-
12	314.00	Secondary Treatment Equipment	2,575					-
13	315.00	Tertiary Equipment	-					-
14	316.00	Disinfection Equipment	-					-
15	317.00	Effluent Lift Station E	1,503					-
16	318.00	Outfall Line	291					-
17	319.00	Sludge, Treatment & Distribution	-					-
18	321.00	Influent Lift Station	178					-
19	322.00	General Treatment Equipment	18,743					-
20		**Subtotal Treatment & Discharge**	$ 72,503	$ -	$ -	$ -	$ -	$ 11,337
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -					$ -
24	341.00	Structures and Improvements	350,713					-
25	342.00	Collection System Lift	1,229,723					-
26	343.00	Collection Mains	12,388,680					(4,310)
27	344.00	Force Mains	1,300,266					-
28	345.00	Discharge Services	2,307,454					-
29	348.00	Manholes	-					-
30		**Subtotal Collection and Influent**	$ 17,576,836	$ -	$ -	$ -	$ -	$ (4,310)
31								
32		**General**						
33	389.00	Land and Land Rights	$ 1,108					$ -
34	390.00	Structures and Improvements	760,473					-
35	391.00	Office Funiture and Equipment	388,328					(23,238)
36	391.10	Computer Equipment	425,623					-
37	392.00	Transportation Equipment	408,123					-
38	393.00	Stores Equipment	6,523					-
39	394.00	Tools, Shop and Garage	93,334					-
40	395.00	Laboratory Equipment	29,565					-
41	396.00	Power Operated Equipment	27,321					-
42	397.00	Communication Equipment	160,926					3,785
43	398.00	Miscellaneous Equipment	62,919					-
44		**Subtotal General**	$ 2,364,243	$ -	$ -	$ -	$ -	$ (19,453)
45								
46		Youngtown Plant *	(96,727)					
47		ADFUC adjustment 3/95	(93,075)					
48		TOTAL WASTEWATER PLANT	$ 19,962,780	$ -	$ (868)	$ -	$ -	$ (12,426)
49								
50								

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decision	ACC Staff
5	Post Test Year Plant	ACC Staff

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Arizona American
Sun City Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Original Cost
1		**Intangible**							
2	301.00	Organization						$ -	$ 122,373
3	302.00	Franchises						-	6,132
4	303.00	Miscellaneous Intangibles						(868)	9,627
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ (868)	$ 138,132
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights						$ -	$ 6,565
9	311.00	Structures and Improvements						11,337	53,532
10	312.00	Preliminary Treatment						-	453
11	313.00	Primary Treatment Equipment						-	-
12	314.00	Secondary Treatment Equipment						-	2,575
13	315.00	Tertiary Equipment						-	-
14	316.00	Disinfection Equipment						-	-
15	317.00	Effluent Lift Station E						-	1,503
16	318.00	Outfall Line						-	291
17	319.00	Sludge, Treatment & Distribution						-	-
18	321.00	Influent Lift Station						-	178
19	322.00	General Treatment Equipment						-	18,743
20		**Subtotal Treatment & Discharge**	$ -	$ -	$ -	$ -	$ -	$ 11,337	$ 83,840
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights							$ -
24	341.00	Structures and Improvements						-	350,713
25	342.00	Collection System Lift						-	1,229,723
26	343.00	Collection Mains						(4,310)	12,384,369
27	344.00	Force Mains						-	1,300,266
28	345.00	Discharge Services						-	2,307,454
29	348.00	Manholes						-	-
30		**Subtotal Collection and Influent**	$ -	$ -	$ -	$ -	$ -	$ (4,310)	$ 17,572,526
31									
32		**General**							
33	389.00	Land and Land Rights			$ -			$ -	$ 1,108
34	390.00	Structures and Improvements			-			-	760,473
35	391.00	Office Funiture and Equipment			-			(23,238)	365,090
36	391.10	Computer Equipment			(138,038)			(138,038)	287,585
37	392.00	Transportation Equipment			-			-	408,123
38	393.00	Stores Equipment			-			-	6,523
39	394.00	Tools, Shop and Garage			-			-	93,334
40	395.00	Laboratory Equipment			-			-	29,565
41	396.00	Power Operated Equipment			(152)			(152)	27,169
42	397.00	Communication Equipment			-			3,785	164,710
43	398.00	Miscellaneous Equipment			(3,437)			(3,437)	59,482
44		**Subtotal General**	$ -	$ -	$ (141,627)	$ -	$ -	$ (161,080)	$ 2,203,163
45									
46		Youngtown Plant *							(96,727)
47		ADFUDC adjustment 3/95	93,075					93,075	-
48		TOTAL WASTEWATER PLANT	$ 93,075	$ -	$ (141,627)	$ -	$ -	$ (61,846)	$ 19,900,933
49									
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51									
52									
53									
54									
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56									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
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Arizona American
Sun City Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Blank Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -		$ -			
3	302.00	Franchises	-		-			
4	303.00	Miscellaneous Intangibles	-		(868)			
5		**Subtotal Intangible**	$ -	$ -	$ (868)	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ -		$ -			
9	311.00	Structures and Improvements	6,372		-			
10	312.00	Preliminary Treatment	63		-			
11	313.00	Primary Treatment Equipment	-		-			
12	314.00	Secondary Treatment Equipment	62		-			
13	315,00	Tertiary Equipment	-		-			
14	316.00	Disinfection Equipment	-		-			
15	317.00	Effluent Lift Station E	378		-			
16	318.00	Outfall Line	61		-			
17	319.00	Sludge, Treatment & Distribution	-		-			
18	321.00	Influent Lift Station	(8,749)		-			
19	322.00	General Treatment Equipment	(331)		-			
20		**Subtotal Treatment & Discharge**	$ (2,143)	$ -	$ -	$ -	$ -	$ -
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -		$ -			
24	341.00	Structures and Improvements	5,455		-			
25	342.00	Collection System Lift	419,098		-			
26	343.00	Collection Mains	5,243,502		-			
27	344.00	Force Mains	70,153		-			
28	345.00	Discharge Services	1,098,603		-			
29	348.00	Manholes	-		-			
30		**Subtotal Collection and Influent**	$ 6,836,811	$ -	$ -	$ -	$ -	$ -
31								
32		**General**						
33	389.00	Land and Land Rights	$ -		$ -			
34	390.00	Structures and Improvements	70,466		-			
35	391.00	Office Funiture and Equipment	83,100		-			
36	391.10	Computer Equipment	(98,704)		-			
37	392.00	Transportation Equipment	236,016		-			
38	393.00	Stores Equipment	1,767		-			
39	394.00	Tools, Shop and Garage	5,228		-			
40	395.00	Laboratory Equipment	5,212		-			
41	396.00	Power Operated Equipment	9,721		-			
42	397.00	Communication Equipment	75,521		-			
43	398.00	Miscellaneous Equipment	29,674		-			
44		**Subtotal General**	$ 418,000	$ -	$ -	$ -	$ -	$ -
45								
46		Youngtown Plant *	(44,798)					
47		ADFUC adjustment 3/95	(18,330)					
48		TOTAL WASTEWATER PLANT	$ 7,189,539	$ -	$ (868)	$ -	$ -	$ -
49								

50	ADJ #		Reference
51	1	Plant Not Used and Useful	Rebuttal Schedule B-2, Page 8
52	2	Unidentified Plant	ACC Staff
53	3	Mis-posted Plant	ACC Staff
54	4	Plant Removed by Prev. Decis	ACC Staff
55	5	Post Test Year Plant	ACC Staff

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Arizona American
Sun City Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization						$ -	$ -
3	302.00	Franchises						-	-
4	303.00	Miscellaneous Intangibles						(868)	(868)
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ (868)	$ (868)
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights						$ -	$ -
9	311.00	Structures and Improvements						-	6,372
10	312.00	Preliminary Treatment						-	63
11	313.00	Primary Treatment Equipment						-	-
12	314.00	Secondary Treatment Equipment						-	62
13	315.00	Tertiary Equipment						-	-
14	316.00	Disinfection Equipment						-	-
15	317.00	Effluent Lift Station E						-	378
16	318.00	Outfall Line						-	61
17	319.00	Sludge, Treatment & Distribution						-	-
18	321.00	Influent Lift Station						-	(8,749)
19	322.00	General Treatment Equipment						-	(331)
20		**Subtotal Treatment & Discharge**	$ -	$ -	$ -	$ -	$ -	$ -	$ (2,143)
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights							$ -
24	341.00	Structures and Improvements						-	5,455
25	342.00	Collection System Lift						-	419,098
26	343.00	Collection Mains						-	5,243,502
27	344.00	Force Mains						-	70,153
28	345.00	Discharge Services						-	1,098,603
29	348.00	Manholes						-	-
30		**Subtotal Collection and Influent**	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,836,811
31									
32		**General**							
33	389.00	Land and Land Rights			$ -			$ -	$ -
34	390.00	Structures and Improvements			-			-	70,466
35	391.00	Office Funiture and Equipment			-			-	83,100
36	391.10	Computer Equipment			(8,364)			(8,364)	(107,068)
37	392.00	Transportation Equipment			-			-	236,016
38	393.00	Stores Equipment			-			-	1,767
39	394.00	Tools, Shop and Garage			-			-	5,228
40	395.00	Laboratory Equipment			-			-	5,212
41	396.00	Power Operated Equipment			(84)			(84)	9,638
42	397.00	Communication Equipment			-			-	75,521
43	398.00	Miscellaneous Equipment			(3,437)			(3,437)	26,237
44		**Subtotal General**	$ -	$ -	$ (11,884)	$ -	$ -	$ (11,884)	$ 406,116
45									
46		Youngtown Plant *							(44,798)
47		ADFUC adjustment 3/95	18,330					18,330	-
48		TOTAL WASTEWATER PLANT	$ 18,330	$ -	$ (11,884)	$ -	$ -	$ 5,578	$ 7,195,117
49									
50									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
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Arizona American
Sun City Wastewater
Common Plant Allocation
at December 31, 2002

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Original Cost	Rebuttal Allocated Original Cost	Rebuttal Allocated Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.22706	$ 1,108	$ 1,108	$ -	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.22706	760,473	760,473	-	70,608	70,608	-
5	391.00	Office Funiture and Equipment	0.22706	226,528	226,528	-	81,856	81,856	-
6	391.10	Computer Equipment	0.22706	324,323	186,285	(138,038)	(98,704)	(107,068)	(8,364)
7	392.00	Transportation Equipment	0.22706	408,123	408,123	-	235,727	235,727	-
8	393.00	Stores Equipment	0.22706	6,523	6,523	-	1,767	1,767	-
9	394.00	Tools, Shop and Garage	0.22706	93,334	93,334	-	4,141	4,141	-
10	395.00	Laboratory Equipment	0.22706	29,565	29,565	-	5,212	5,212	-
11	396.00	Power Operated Equipment	0.22706	27,321	27,169	(152)	9,721	9,638	(84)
12	397.00	Communication Equipment	0.22706	131,126	131,126	-	75,521	75,521	-
13	398.00	Miscellaneous Equipment	0.22706	62,919	59,482	(3,437)	29,167	25,730	(3,437)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 2,071,343	$ 1,929,716	$ (141,627)	$ 415,016	$ 403,132	$ (11,884)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-2, Page 5								
24									
25									

Arizona American - Sun City Wastewater
RCND Plant Summary
at December 31, 2001

Exhibit
Schedule B-3
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 146,163	$ (23,790)	$ 122,373	$ -	$ -	$ -
3	302.00	Franchises	12,784	(6,652)	6,132	-	-	-
4	303.00	Miscellaneous Intangibles	13,867	(4,241)	9,627	-	(868)	(868)
5		**Subtotal Intangible**	$ 172,814	$ (34,682)	$ 138,132	$ -	$ (868)	$ (868)
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 7,593	$ (1,937)	$ 5,656	$ -	$ -	$ -
9	311.00	Structures and Improvements	46,661	10,584	57,245	7,604	(208)	7,396
10	312.00	Preliminary Treatment	500	(14)	485	70	(2)	68
11	313.00	Primary Treatment Equipment	-	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	2,662	(34)	2,628	64	(1)	63
13	315.00	Tertiary Equipment	-	-	-	-	-	-
14	316.00	Disinfection Equipment	-	-	-	-	-	-
15	317.00	Effluent Lift Station E	2,049	(118)	1,932	510	(28)	482
16	318.00	Outfall Line	480	(53)	426	98	(11)	88
17	319.00	Sludge, Treatment & Distribution	-	-	-	-	-	-
18	321.00	Influent Lift Station	248	(17)	231	(12,187)	851	(11,337)
19	322.00	General Treatment Equipment	22,891	(860)	22,031	(445)	24	(421)
20		**Subtotal Treatment & Discharge**	$ 83,084	$ 7,550	$ 90,634	$ (4,286)	$ 625	$ (3,661)
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
24	341.00	Structures and Improvements	395,144	(8,470)	386,674	5,683	(44)	5,640
25	342.00	Collection System Lift	1,495,736	(42,345)	1,453,391	498,590	(12,654)	485,936
26	343.00	Collection Mains	37,982,230	(6,171,367)	31,810,863	13,779,189	(2,544,076)	11,235,113
27	344.00	Force Mains	1,489,670	(81,642)	1,408,028	78,412	(3,560)	74,852
28	345.00	Discharge Services	7,543,112	(1,549,693)	5,993,419	3,537,974	(722,025)	2,815,949
29	348.00	Manholes	0	(287,131)	(287,131)	2,040,300	(119,501)	1,920,798
30		**Subtotal Collection and Influent**	$ 48,905,893	$ (8,140,648)	$ 40,765,245	$ 19,940,148	$ (3,401,860)	$ 16,538,288
31								
32		**General**						
33	389.00	Land and Land Rights	$ 2,867	$ (1,759)	$ 1,108	$ -	$ -	$ -
34	390.00	Structures and Improvements	1,032,126	(26,950)	1,005,176	114,764	(3,764)	111,000
35	391.00	Office Funiture and Equipment	454,018	(22,967)	431,051	115,261	2,151	117,411
	391.10	Computer Equipment	462,043	(155,872)	306,172	(109,797)	(8,061)	(117,858)
36	392.00	Transportation Equipment	451,577	(6,331)	445,246	262,680	(3,803)	258,877
37	393.00	Stores Equipment	8,506	88	8,594	2,487	82	2,568
38	394.00	Tools, Shop and Garage	118,937	(198)	118,738	4,290	93	4,383
39	395.00	Laboratory Equipment	34,223	(353)	33,870	6,211	(25)	6,186
40	396.00	Power Operated Equipment	35,050	371	35,421	12,730	96	12,826
41	397.00	Communication Equipment	188,258	1,386	189,644	94,350	(666)	93,683
42	398.00	Miscellaneous Equipment	89,569	(6,098)	83,471	45,154	(6,309)	38,845
43		**Subtotal General**	$ 2,877,175	$ (218,683)	$ 2,658,492	$ 548,129	$ (20,206)	$ 527,923
44								
45		Youngtown Plant *	(115,476)	-	(115,476)	(53,482)	-	(53,482)
46		AFUDC adjustment 3/95 **	(112,258)	112,258	0	(22,108)	22,108	(0)
47		TOTAL WASTEWATER PLANT	$ 51,811,232	$ (8,274,205)	$ 43,537,027	$ 20,408,401	$ (3,400,201)	$ 17,008,200
48								
49								
50		SUPPORTING SCHEDULES:						
51		Rebuttal B-3, page 2a, 2b, 3a, 3b						
52								
53								

Arizona American
Sun City Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Blank Not Used Adjustment 1	Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 146,163					$ -
3	302.00	Franchises	12,784					-
4	303.00	Miscellaneous Intangibles	13,867		(2,604)			-
5		**Subtotal Intangible**	$ 172,814	$ -	$ (2,604)	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 7,593					$ -
9	311.00	Structures and Improvements	46,661					11,337
10	312.00	Preliminary Treatment	500					-
11	313.00	Primary Treatment Equipment	-					-
12	314.00	Secondary Treatment Equipment	2,662					-
13	315.00	Tertiary Equipment	-					-
14	316.00	Disinfection Equipment	-					-
15	317.00	Effluent Lift Station E	2,049					-
16	318.00	Outfall Line	480					-
17	319.00	Sludge, Treatment & Distribution	-					-
18	321.00	Influent Lift Station	248					-
19	322.00	General Treatment Equipment	22,891					-
20		**Subtotal Treatment & Discharge**	$ 83,084	$ -	$ -	$ -	$ -	$ 11,337
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -					$ -
24	341.00	Structures and Improvements	395,144					-
25	342.00	Collection System Lift	1,495,736					-
26	343.00	Collection Mains	37,982,230					(4,310)
27	344.00	Force Mains	1,489,670					-
28	345.00	Discharge Services	7,543,112					-
29	348.00	Manholes	0					-
30		**Subtotal Collection and Influent**	$ 48,905,893	$ -	$ -	$ -	$ -	$ (4,310)
31								
32		**General**						
33	389.00	Land and Land Rights	$ 2,867					$ -
34	390.00	Structures and Improvements	1,032,126					-
35	391.00	Office Funiture and Equipment	454,018					(23,238)
36	391.10	Computer Equipment	462,043					-
37	392.00	Transportation Equipment	451,577					-
38	393.00	Stores Equipment	8,506					-
39	394.00	Tools, Shop and Garage	118,937					-
40	395.00	Laboratory Equipment	34,223					-
41	396.00	Power Operated Equipment	35,050					-
42	397.00	Communication Equipment	188,258					3,785
43	398.00	Miscellaneous Equipment	89,569					-
44		**Subtotal General**	$ 2,877,175	$ -	$ -	$ -	$ -	$ (19,453)
45								
46		Youngtown Plant *	(115,476)					
47		ADFUC adjustment 3/95	(112,258)					
48		TOTAL WASTEWATER PLANT	$ 51,811,232	$ -	$ (2,604)	$ -	$ -	$ (12,426)
49								
50								

ADJ #		Reference
1	Plant Not Used and Useful	Blank
2	Unidentified Plant	Rebuttal Sched B-3, Page 8
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decision	Blank
5	Post Test Year Plant	ACC Staff

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Arizona American
Sun City Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Trended Reproduction Cost New
1		**Intangible**							
2	301.00	Organization				$ (23,790)		$ (23,790)	$ 122,373
3	302.00	Franchises				(6,652)		(6,652)	6,132
4	303.00	Miscellaneous Intangibles				(1,637)		(4,241)	9,627
5		**Subtotal Intangible**	$ -	$ -	$ -	$ (32,078)	$ -	$ (34,682)	$ 138,132
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights				$ (1,937)		$ (1,937)	$ 5,656
9	311.00	Structures and Improvements				(754)		10,584	57,245
10	312.00	Preliminary Treatment				(14)		(14)	485
11	313.00	Primary Treatment Equipment				-		-	-
12	314.00	Secondary Treatment Equipment				(34)		(34)	2,628
13	315,00	Tertiary Equipment				-		-	-
14	316.00	Disinfection Equipment				-		-	-
15	317.00	Effluent Lift Station E				(118)		(118)	1,932
16	318.00	Outfall Line				(53)		(53)	426
17	319.00	Sludge, Treatment & Distribution				-		-	-
18	321.00	Influent Lift Station				(17)		(17)	231
19	322.00	General Treatment Equipment				(860)		(860)	22,031
20		**Subtotal Treatment & Discharge**	$ -	$ -	$ -	$ (3,787)	$ -	$ 7,550	$ 90,634
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights				$ -			$ -
24	341.00	Structures and Improvements				(8,470)		(8,470)	386,674
25	342.00	Collection System Lift				(42,345)		(42,345)	1,453,391
26	343.00	Collection Mains				(6,167,056)		(6,171,367)	31,810,863
27	344.00	Force Mains				(81,642)		(81,642)	1,408,028
28	345.00	Discharge Services				(1,549,693)		(1,549,693)	5,993,419
29	348.00	Manholes				(287,131)		(287,131)	(287,131)
30		**Subtotal Collection and Influent**	$ -	$ -	$ -	$ (8,136,337)	$ -	$ (8,140,648)	$ 40,765,245
31									
32		**General**							
33	389.00	Land and Land Rights			$ (1,759)			$ (1,759)	$ 1,108
34	390.00	Structures and Improvements			(26,950)			(26,950)	1,005,176
35	391.00	Office Funiture and Equipment			270			(22,967)	431,051
36	391.10	Computer Equipment			(155,872)			(155,872)	306,172
37	392.00	Transportation Equipment			(6,331)			(6,331)	445,246
38	393.00	Stores Equipment			88			88	8,594
39	394.00	Tools, Shop and Garage			(198)			(198)	118,738
40	395.00	Laboratory Equipment			(353)			(353)	33,870
41	396.00	Power Operated Equipment			371			371	35,421
42	397.00	Communication Equipment			(2,399)			1,386	189,644
43	398.00	Miscellaneous Equipment			(6,098)			(6,098)	83,471
44		**Subtotal General**	$ -	$ -	$ (199,230)	$ -	$ -	$ (218,683)	$ 2,658,492
45									
46		Youngtown Plant *							(115,476)
47		ADFUC adjustment 3/95	112,258					112,258	0
48		TOTAL WASTEWATER PLANT	$ 112,258	$ -	$ (199,230)	$ (8,172,203)	$ -	$ (8,274,205)	$ 43,537,027
49									
50									
51									
52									
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54									
55									
56									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American
Sun City Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Line No.	Direct Accumulated Depreciation	Blank Not Used Adjustment 1	Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**	1						
2	301.00	Organization	2	$ -		$ -			
3	302.00	Franchises	3	-		-			
4	303.00	Miscellaneous Intangibles	4	-		-			
5		**Subtotal Intangible**	5	$ -	$ -	$ -	$ -	$ -	$ -
6			6						
7		**Treatment & Discharge**	7						
8	310.00	Land and Land Rights	8	$ -		$ -			
9	311.00	Structures and Improvements	9	7,604		-			
10	312.00	Preliminary Treatment	10	70		-			
11	313.00	Primary Treatment Equipment	11	-		-			
12	314.00	Secondary Treatment Equipment	12	64		-			
13	315,00	Tertiary Equipment	13	-		-			
14	316.00	Disinfection Equipment	14	-		-			
15	317.00	Effluent Lift Station E	15	510		-			
16	318.00	Outfall Line	16	98		-			
17	319.00	Sludge, Treatment & Distribution	17	-		-			
18	321.00	Influent Lift Station	18	(12,187)		-			
19	322.00	General Treatment Equipment	19	(445)		-			
20		**Subtotal Treatment & Discharge**	20	$ (4,286)	$ -	$ -	$ -	$ -	$ -
21			21						
22		**Collection and Influent**	22						
23	340.00	Land and Land Rights	23	$ -		$ -			
24	341.00	Structures and Improvements	24	5,683		-			
25	342.00	Collection System Lift	25	498,590		-			
26	343.00	Collection Mains	26	13,779,189		-			
27	344.00	Force Mains	27	78,412		-			
28	345.00	Discharge Services	28	3,537,974		-			
29	348.00	Manholes	29	2,040,300		-			
30		**Subtotal Collection and Influent**	30	$ 19,940,148	$ -	$ -	$ -	$ -	$ -
31			31						
32		**General**	32						
33	389.00	Land and Land Rights	33	$ -		$ -			
34	390.00	Structures and Improvements	34	114,764		-			
35	391.00	Office Funiture and Equipment	35	115,261		-			
36	391.10	Computer Equipment	36	(109,797)		-			
37	392.00	Transportation Equipment	37	262,680		-			
38	393.00	Stores Equipment	38	2,487		-			
39	394.00	Tools, Shop and Garage	39	4,290		-			
40	395.00	Laboratory Equipment	40	6,211		-			
41	396.00	Power Operated Equipment	41	12,730		-			
42	397.00	Communication Equipment	42	94,350		-			
43	398.00	Miscellaneous Equipment	43	45,154		-			
44		**Subtotal General**	44	$ 548,129	$ -	$ -	$ -	$ -	$ -
45			45						
46		Youngtown Plant *	46	(53,482)					
47		ADFUC adjustment 3/95	47	(22,108)		-			
48		TOTAL WASTEWATER PLANT	48	$ 20,408,401	$ -	$ -	$ -	$ -	$ -
49			49						

ADJ #		Reference
1	Plant Not Used and Useful	Blank
2	Unidentified Plant	Rebuttal Sched B-3, Page 8
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decis	Blank
5	Post Test Year Plant	ACC Staff

Arizona American
Sun City Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization				$ -		$ -	$ -
3	302.00	Franchises				-		-	-
4	303.00	Miscellaneous Intangibles				(868)		(868)	(868)
5		**Subtotal Intangible**	$ -	$ -	$ -	$ (868)	$ -	$ (868)	$ (868)
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights				$ -		$ -	$ -
9	311.00	Structures and Improvements				(208)		(208)	7,396
10	312.00	Preliminary Treatment				(2)		(2)	68
11	313.00	Primary Treatment Equipment				-		-	-
12	314.00	Secondary Treatment Equipment				(1)		(1)	63
13	315,00	Tertiary Equipment				-		-	-
14	316.00	Disinfection Equipment				-		-	-
15	317.00	Effluent Lift Station E				(28)		(28)	482
16	318.00	Outfall Line				(11)		(11)	88
17	319.00	Sludge, Treatment & Distribution				-		-	-
18	321.00	Influent Lift Station				851		851	(11,337)
19	322.00	General Treatment Equipment				24		24	(421)
20		**Subtotal Treatment & Discharge**	$ -	$ -	$ -	$ 625	$ -	$ 625	$ (3,661)
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights				$ -			$ -
24	341.00	Structures and Improvements				(44)		(44)	5,640
25	342.00	Collection System Lift				(12,654)		(12,654)	485,936
26	343.00	Collection Mains				(2,544,076)		(2,544,076)	11,235,113
27	344.00	Force Mains				(3,560)		(3,560)	74,852
28	345.00	Discharge Services				(722,025)		(722,025)	2,815,949
29	348.00	Manholes				(119,501)		(119,501)	1,920,798
30		**Subtotal Collection and Influent**	$ -	$ -	$ -	$ (3,401,860)	$ -	$ (3,401,860)	$ 16,538,288
31									
32		**General**							
33	389.00	Land and Land Rights			$ -			$ -	$ -
34	390.00	Structures and Improvements			(3,764)			(3,764)	111,000
35	391.00	Office Funiture and Equipment			2,151			2,151	117,411
36	391.10	Computer Equipment			(8,061)			(8,061)	(117,858)
37	392.00	Transportation Equipment			(3,803)			(3,803)	258,877
38	393.00	Stores Equipment			82			82	2,568
39	394.00	Tools, Shop and Garage			93			93	4,383
40	395.00	Laboratory Equipment			(25)			(25)	6,186
41	396.00	Power Operated Equipment			96			96	12,826
42	397.00	Communication Equipment			(666)			(666)	93,683
43	398.00	Miscellaneous Equipment			(6,309)			(6,309)	38,845
44		**Subtotal General**	$ -	$ -	$ (20,206)	$ -	$ -	$ (20,206)	$ 527,923
45									
46		Youngtown Plant *							(53,482)
47		ADFUC adjustment 3/95	22,108					22,108	(0)
48		TOTAL WASTEWATER PLANT	$ 22,108	$ -	$ (20,206)	$ (3,402,103)	$ -	$ (3,400,201)	$ 17,008,200
49									
50									
51									
52									
53									
54									
55									
56									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American - Sun City Wastewater
RCND Common Plant Allocation
at December 31, 2002

Exhibit
Rebuttal Schedule B-3
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Trended Amount	Rebuttal Allocated Trended Amount	Rebuttal Allocated Trended Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.22706	$ 2,867	$ 1,108	$ (1,759)	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.22706	1,032,126	1,005,176	(26,950)	114,907	111,142	(3,764)
5	391.00	Office Funiture and Equipment	0.22706	292,218	292,489	270	114,017	116,168	2,151
6	391.10	Computer Equipment	0.22706	360,743	204,872	(155,872)	(109,797)	(117,858)	(8,061)
7	392.00	Transportation Equipment	0.22706	451,577	445,246	(6,331)	262,392	258,588	(3,803)
8	393.00	Stores Equipment	0.22706	8,506	8,594	88	2,487	2,568	82
9	394.00	Tools, Shop and Garage	0.22706	118,937	118,738	(198)	3,203	3,296	93
10	395.00	Laboratory Equipment	0.22706	34,223	33,870	(353)	6,211	6,186	(25)
11	396.00	Power Operated Equipment	0.22706	35,050	35,421	371	12,730	12,826	96
12	397.00	Communication Equipment	0.22706	158,458	156,059	(2,399)	94,350	93,683	(666)
13	398.00	Miscellaneous Equipment	0.22706	89,569	83,471	(6,098)	44,648	38,339	(6,309)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 2,584,275	$ 2,385,045	$ (199,230)	$ 545,145	$ 524,939	$ (20,206)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-3, Page 5								
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1								
2	389.00		0 $ 4,880	$ -	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements	3,349,189	-	3,349,189	310,963	-	310,963
4	391.00	Office Funiture and Equipment	997,650	-	997,650	360,503	-	360,503
5	391.10	Computer Equipment	1,428,345	(607,932)	820,413	(434,702)	(36,834)	(471,536)
6	392.00	Transportation Equipment	1,797,409	-	1,797,409	1,038,162	-	1,038,162
7	393.00	Stores Equipment	28,727	-	28,727	7,782	-	7,782
8	394.00	Tools, Shop and Garage	411,051	-	411,051	18,237	-	18,237
9	395.00	Laboratory Equipment	130,207	-	130,207	22,954	-	22,954
10	396.00	Power Operated Equipment	120,325	(669)	119,656	42,813	(368)	42,444
11	397.00	Communication Equipment	577,488	-	577,488	332,600	-	332,600
12	398.00	Miscellaneous Equipment	277,101	(15,137)	261,964	128,455	(15,137)	113,318
13								
14								
15		TOTALCOMMON PLANT	$ 9,122,373	$ (623,738)	$ 8,498,635	$ 1,827,766	$ (52,339)	$ 1,775,427
16								
17			SUPPORTING SCHEDULES					
18			Rebuttal Schedule B-2, Page 6a, 6b, 7a, 7b					
19								
20								

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880						
3	390.00	Structures and Improvements	3,349,189						
4	391.00	Office Funiture and Equipment	997,650						
5	391.10	Computer Equipment	1,428,345		(607,932)				
6	392.00	Transportation Equipment	1,797,409						
7	393.00	Stores Equipment	28,727						
8	394.00	Tools, Shop and Garage	411,051						
9	395.00	Laboratory Equipment	130,207						
10	396.00	Power Operated Equipment	120,325		(669)				
11	397.00	Communication Equipment	577,488						
12	398.00	Miscellaneous Equipment	277,101	(458)		(14,679)			
13		**Subtotal General**	$ 9,122,373	$ (458)	$ (608,601)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
2	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
3	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights							$ -	$ 4,880
3	390.00	Structures and Improvements							-	3,349,189
4	391.00	Office Funiture and Equipment							-	997,650
5	391.10	Computer Equipment							(607,932)	820,413
6	392.00	Transportation Equipment							-	1,797,409
7	393.00	Stores Equipment							-	28,727
8	394.00	Tools, Shop and Garage							-	411,051
9	395.00	Laboratory Equipment							-	130,207
10	396.00	Power Operated Equipment							(669)	119,656
11	397.00	Communication Equipment							-	577,488
12	398.00	Miscellaneous Equipment							(15,137)	261,964
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (623,738)	$ 8,498,635
14										
15			ADJ #			Reference				
16			6							
17			7							
18			8							
19			9							
20			10							
21										
22										
23										

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7a
Witness: Bour

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -						
3	390.00	Structures and Improvements	310,963						
4	391.00	Office Funiture and Equipment	360,503						
5	391.10	Computer Equipment	(434,702)		(36,834)				
6	392.00	Transportation Equipment	1,038,162						
7	393.00	Stores Equipment	7,782						
8	394.00	Tools, Shop and Garage	18,237						
9	395.00	Laboratory Equipment	22,954						
10	396.00	Power Operated Equipment	42,813		(368)				
11	397.00	Communication Equipment	332,600						
12	398.00	Miscellaneous Equipment	128,455	(458)		(14,679)			
13		**Subtotal General**	$ 1,827,766	$ (458)	$ (37,202)	$ (14,679)	$ -	$ -	$ -
14									
15			ADJ #			Reference			
16			1	Plant Not Used and Useful		Rebuttal B-2, Page 8			
17			2	Plant Not Used and Useful		Rebuttal B-2, Page 8			
18			3	Plant Not Used and Useful		Rebuttal B-2, Page 8			
19			4						
20			5						
21									
22									
23									

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights							$ -	$ -
3	390.00	Structures and Improvements							-	310,963
4	391.00	Office Funiture and Equipment							-	360,503
5	391.10	Computer Equipment							(36,834)	(471,536)
6	392.00	Transportation Equipment							-	1,038,162
7	393.00	Stores Equipment							-	7,782
8	394.00	Tools, Shop and Garage							-	18,237
9	395.00	Laboratory Equipment							-	22,954
10	396.00	Power Operated Equipment							(368)	42,444
11	397.00	Communication Equipment							-	332,600
12	398.00	Miscellaneous Equipment							(15,137)	113,318
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (52,339)	$ 1,775,427
14										

ADJ #	Reference
6	
7	
8	
9	
10	

Arizona-American Sun City Wastewater
Unidentified Plant

Exhibit
Rebuttal Schedule B-2
Page 8

Asset Id	Asset Desc.	Class	Acq. Date	Original Cost	A/D	RCN	Adjust O.C.	Adjust A/D	Adjust RCND	Adj.RCN A/D
1673417	UNIDENTIFIED	T30300	19740701	868	0	2,604	(868)	0	(2,604)	0
1673427	UNIDENTIFIED	T39800	19750701	14,679	(15,870)	39,030	(14,679)	(14,679)	(39,030)	(39,030)

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
RCND Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-3
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 51,811,232	(1)	(8,274,205)	$ 43,537,027
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	20,408,401	(2)	(3,400,201)	17,008,200
8					
9	Net Utility Plant				
10	in Service	$ 31,402,831			$ 26,528,827
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	8,588,165	(3)	(1,349,095)	7,239,070
15	Contributions in Aid of				
16	Construction - Net (Ratemaking	3,081,090	(4)	(484,001)	2,597,089
17	Purposes Only)				
18	Customer Meter Deposits	-			-
19	Deferred Income Taxes	-			-
20	Investment Tax Credits	-			-
21	**Plus:**				
22	Tolleson Trickling				
23	Filter	500,000			500,000
24	Deferred Assets	-			-
25	Working capital	-			-
26	Citizens Acquisition Adjustment	-			-
27					
28	Total	$ 20,233,577			$ 17,192,669
29					
30					
31	(1) See B-3, Page 2				
32	(2) See B-3, Page 3				
33	(3) Adjust AIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
34	(4) Adjust CIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
35					
36					
37					
38					
39					
40					
41					
42					

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 5
Witness: Bourassa

Line No.	Account No.	Description		Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Trended Direct Accumulated Depreciation	Adjustment	Rebuttal Trended Accumulated Depreciation
1									
2	389.00		0	$ 12,628	$ (7,748)	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements		4,545,571	(118,688)	4,426,882	506,059	(16,579)	489,480
4	391.00	Office Funiture and Equipment		1,286,955	1,191	1,288,146	502,142	9,471	511,613
5	391.10	Computer Equipment		1,588,744	(686,472)	902,272	(483,558)	(35,499)	(519,057)
6	392.00	Transportation Equipment		1,988,785	(27,882)	1,960,903	1,155,595	(16,750)	1,138,845
7	393.00	Stores Equipment		37,463	387	37,850	10,952	359	11,312
8	394.00	Tools, Shop and Garage		523,808	(874)	522,934	14,105	411	14,516
9	395.00	Laboratory Equipment		150,719	(1,554)	149,166	27,352	(109)	27,243
10	396.00	Power Operated Equipment		154,364	1,634	155,998	56,063	425	56,488
11	397.00	Communication Equipment		697,864	(10,566)	687,298	415,524	(2,934)	412,590
12	398.00	Miscellaneous Equipment		394,470	(26,855)	367,615	196,632	(27,786)	168,847
13									
14									
15		TOTALCOMMON PLANT		$ 11,381,370	$ (877,427)	$ 10,503,943	$ 2,400,866	$ (88,989)	$ 2,311,877
16									
17				SUPPORTING SCHEDULES					
18				Rebuttal Schedule B-3, Page 6a, 6b, 7a, 7b					
19									
20									

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6a

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880				(6,755)	-	-
3	390.00	Structures and Improvements	3,349,189				(78,054)	-	(2,575)
4	391.00	Office Funiture and Equipment	997,650				5,995	(2,202)	6,085
5	391.10	Computer Equipment	1,428,345		(670,782)		(12,717)	-	(2,402)
6	392.00	Transportation Equipment	1,797,409				(14,376)	(109)	(3,537)
7	393.00	Stores Equipment	28,727				732	-	59
8	394.00	Tools, Shop and Garage	411,051				1,875	(1,135)	(212)
9	395.00	Laboratory Equipment	130,207				(52)	-	116
10	396.00	Power Operated Equipment	120,325		(799)		3,730	-	(1,226)
11	397.00	Communication Equipment	577,488				(1,313)	-	1,715
12	398.00	Miscellaneous Equipment	277,101	(670)		(39,030)	12,635	(43)	454
13		**Subtotal General**	$ 9,122,373	$ (670)	$ (671,581)	$ (39,030)	$ (88,300)	$ (3,489)	$ (1,523)
14									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights	-	(993)	-	-	-		$ (7,748)	$ (2,868)
3	390.00	Structures and Improvements	(17,341)	(10)	(3,192)	(2,612)	(14,906)		(118,688)	3,230,501
4	391.00	Office Funiture and Equipment	(4,567)	(247)	(2,019)	(906)	(947)		1,191	998,841
5	391.10	Computer Equipment	241	(255)	(556)	-	-		(686,472)	741,874
6	392.00	Transportation Equipment	(5,231)	(404)	(4,372)	148	-		(27,882)	1,769,527
7	393.00	Stores Equipment	(246)	(158)	-	-	-		387	29,114
8	394.00	Tools, Shop and Garage	(1,038)	(270)	(94)	-	-		(874)	410,177
9	395.00	Laboratory Equipment	124	-	-	(727)	(1,015)		(1,554)	128,654
10	396.00	Power Operated Equipment	11	-	-	(82)	-		1,634	121,959
11	397.00	Communication Equipment	(10,889)	(83)	3	-	-		(10,566)	566,923
12	398.00	Miscellaneous Equipment	413	(17)	(609)	11	-		(26,855)	250,246
13		**Subtotal General**	$ (38,523)	$ (2,436)	$ (10,839)	$ (4,168)	$ (16,868)	$ -	$ (877,427)	$ 8,244,946
14										
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ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 7a

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -				-	-	-
3	390.00	Structures and Improvements	310,963				(14,303)	-	(901)
4	391.00	Office Funiture and Equipment	360,503				3,247	526	6,108
5	391.10	Computer Equipment	(434,702)		(40,657)		5,273	-	118
6	392.00	Transportation Equipment	1,038,162				(9,526)	(109)	(2,171)
7	393.00	Stores Equipment	7,782				357	-	46
8	394.00	Tools, Shop and Garage	18,237				175	442	(60)
9	395.00	Laboratory Equipment	22,954				(18)	-	43
10	396.00	Power Operated Equipment	42,813		(440)		1,414	-	(546)
11	397.00	Communication Equipment	332,600				(1,154)	-	1,730
12	398.00	Miscellaneous Equipment	128,455	(670)		(39,030)	8,302	3,466	213
13		**Subtotal General**	$ 1,827,766	$ (670)	$ (41,096)	$ (39,030)	$ (6,233)	$ 4,325	$ 4,581
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
7b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights	-	-	-	-	-		$ -	$ -
3	390.00	Structures and Improvements	(492)	(2)	(259)	(93)	(529)		(16,579)	294,384
4	391.00	Office Funiture and Equipment	82	(44)	(274)	(80)	(94)		9,471	369,974
5	391.10	Computer Equipment	(9)	(178)	(48)	-	-		(35,499)	(470,201)
6	392.00	Transportation Equipment	(1,564)	(313)	(3,018)	(49)	-		(16,750)	1,021,413
7	393.00	Stores Equipment	5	(48)	-	-	-		359	8,141
8	394.00	Tools, Shop and Garage	(89)	(38)	(19)	-	-		411	18,648
9	395.00	Laboratory Equipment	28	-	-	(58)	(104)		(109)	22,845
10	396.00	Power Operated Equipment	1	-	-	(4)	-		425	43,238
11	397.00	Communication Equipment	(3,485)	(28)	3	-	-		(2,934)	329,666
12	398.00	Miscellaneous Equipment	150	(3)	(213)	0	-		(27,786)	100,670
13		**Subtotal General**	$ (5,372)	$ (654)	$ (3,829)	$ (284)	$ (727)	$ -	$ (88,989)	$ 1,738,777
14										
15										
16										
17										
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22										
23										
24										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona-American Sun City Wastewater
B-3 Adjustments

Exhibit B-4
Page A2
Witness: Bourassa

Line No.	Account No.	Description	RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted RCN	(B-3, page 2b, Adj. #9) Adjustment RCN Direct to RCN Rebuttal	Adjusted RCN Rebuttal
1		**Intangible**					
2	301.00	Organization	146,163	-	146,163	(23,790)	122,373
3	302.00	Franchises	12,784	-	12,784	(6,652)	6,132
4	303.00	Miscellaneous Intangibles	13,867	(2,604)	11,263	(1,637)	9,627
5		**Subtotal Intangible**	172,814	(2,604)	170,210	(32,078)	138,132
6							
7		**Treatment & Discharge**					
8	310.00	Land and Land Rights	7,593	-	7,593	(1,937)	5,656
9	311.00	Structures and Improvements	26,561	-	26,561	(754)	25,808
10	312.00	Preliminary Treatment	500	-	500	(14)	485
11	313.00	Primary Treatment Equipment	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	2,662	-	2,662	(34)	2,628
13	315.00	Tertiary Equipment	-	-	-	-	-
14	316.00	Disinfection Equipment	-	-	-	-	-
15	317.00	Effluent Lift Station E	2,049	-	2,049	(118)	1,932
16	318.00	Outfall Line	480	-	480	(53)	426
17	319.00	Sludge, Treatment & Distribution	-	-	-	-	-
18	321.00	Influent Lift Station	248	-	248	(17)	231
19	322.00	General Treatment Equipment	22,891	-	22,891	(860)	22,031
20		**Subtotal Treat & Disc**	62,984	-	62,984	(3,787)	59,197
21							
22		**Collection and Influent**					
23	340.00	Land and Land Rights	-	-	-	-	-
24	341.00	Structures and Improvements	395,144	-	395,144	(8,470)	386,674
25	342.00	Collection System Lift	1,495,736	-	1,495,736	(42,345)	1,453,391
26	343.00	Collection Mains	30,578,195	-	30,578,195	(6,167,056)	24,411,138
27	344.00	Force Mains	1,489,670	-	1,489,670	(81,642)	1,408,028
28	345.00	Discharge Services	7,543,112	-	7,543,112	(1,549,693)	5,993,419
29	348.00	Manholes	7,398,106	-	7,398,106	(287,131)	7,110,974
30		**Subtotal Coll.and Infl.**	48,899,963	-	48,899,963	(8,136,337)	40,763,625
31							
32		**General**				**(Common Plant, B-2, Page 6)**	
33	389.00	Land and Land Rights	-	-	-	-	-
34	390.00	Structures and Improvements	-	-	-	-	-
35	391.00	Office Funiture and Equipment	59,223	-	59,223	(2,202)	57,020
36	391.10	Computer Equipment	-	-	-	-	-
37	392.00	Transportation Equipment	2,973	-	2,973	(109)	2,863
38	393.00	Stores Equipment	-	-	-	-	-
39	394.00	Tools, Shop and Garage	81,921	-	81,921	(1,135)	80,786
40	395.00	Laboratory Equipment	-	-	-	-	-
41	396.00	Power Operated Equipment	-	-	-	-	-
42	397.00	Communication Equipment	-	-	-	-	-
43	398.00	Miscellaneous Equipment	44,988	(39,030)	5,958	(43)	5,916
44		**Subtotal General**	189,104	(39,030)	150,074	(3,489)	146,585
45							
46							
47							
48		TOTAL WASTEWATER PLANT	49,324,865	(41,634)	49,283,231	(8,175,692)	41,107,539
49							
50							
51							
52							

Arizona-American Sun City Wastewater
B-3 Adjustments

Exhibit B-4
Page A3
Witness: Bourassa

Line No.	Account No.	Description	A/D RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted A/D RCN Rebuttal	Ratio	A/D RCN Rebttual	(B-3, page 3b, Adj. #9) A/D Adjustment Adjusted RCN Direct to RCN Rebuttal
1		**Intangible**						
2	301.00	Organization	-	-	-	1.0000	-	-
3	302.00	Franchises	-	-	-	1.0000	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	1.0000	(868)	(868)
5		**Subtotal Intangible**	-	-	-		(868)	(868)
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	-	-	-	0.8616	-	-
9	311.00	Structures and Improvements	7,328	-	7,328	1.1681	7,120	(208)
10	312.00	Preliminary Treatment	70	-	70	1.0718	68	(2)
11	313.00	Primary Treatment Equipment	-	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	64	-	64	1.0205	63	(1)
13	315.00	Tertiary Equipment	-	-	-	-	-	-
14	316.00	Disinfection Equipment	-	-	-	-	-	-
15	317.00	Effluent Lift Station E	495	-	495	1.2848	467	(28)
16	318.00	Outfall Line	95	-	95	1.4655	85	(11)
17	319.00	Sludge, Treatment & Distribution	-	-	-	-	-	-
18	321.00	Influent Lift Station	(12,189)	-	(12,189)	1.2958	(11,339)	851
19	322.00	General Treatment Equipment	(633)	-	(633)	1.1754	(609)	24
20		**Subtotal Treat & Disc**	(4,769)	-	(4,769)		(4,144)	625
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	-	-	-	-	-	-
24	341.00	Structures and Improvements	2,036	-	2,036	1.1025	1,992	(44)
25	342.00	Collection System Lift	446,962	-	446,962	1.1819	434,309	(12,654)
26	343.00	Collection Mains	12,614,325	-	12,614,325	2.4690	10,070,249	(2,544,076)
27	344.00	Force Mains	64,960	-	64,960	1.0829	61,400	(3,560)
28	345.00	Discharge Services	3,514,448	-	3,514,448	2.5974	2,792,423	(722,025)
29	348.00	Manholes	3,079,022	-	3,079,022	2.8492	2,959,521	(119,501)
30		**Subtotal Coll.and Infl.**	19,721,753	-	19,721,753		16,319,893	(3,401,860)
31								
32		**General**						**(Common Plant, B-2, Page 7)**
33	389.00	Land and Land Rights	-	-	-	-	-	-
34	390.00	Structures and Improvements	-	-	-	-	-	-
35	391.00	Office Funiture and Equipment	(14,155)	-	(14,155)	1.0520	(13,629)	526
36	391.10	Computer Equipment	-	-	-	-	-	-
37	392.00	Transportation Equipment	2,973	-	2,973	1.2385	2,863	(109)
38	393.00	Stores Equipment	-	-	-	-	-	-
39	394.00	Tools, Shop and Garage	(31,884)	-	(31,884)	1.6597	(31,442)	442
40	395.00	Laboratory Equipment	-	-	-	-	-	-
41	396.00	Power Operated Equipment	-	-	-	-	-	-
42	397.00	Communication Equipment	-	-	-	-	-	-
43	398.00	Miscellaneous Equipment	37,928	(39,030)	(1,102)	1.1387	2,364	3,466
44		**Subtotal General**	(5,138)	(39,030)	(44,168)		(39,843)	4,325
45								
46								
47								
48		TOTAL WASTEWATER PLANT	19,711,846	(39,030)	19,672,816		16,275,038	(3,397,778)
49								
50								
51								
52								

Arizona-American Sun City Wastewater
B-3 Adjustments

Exhibit B-4
Page A1
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	B-2 Adjustments	Adjusted Original Cost	O.C. A/D	B-2 Adjustments	O.C. Adjusted A/D
1		**Intangible**						
2	301.00	Organization	122,373	-	122,373	-	-	-
3	302.00	Franchises	6,132	-	6,132	-	-	-
4	303.00	Miscellaneous Intangibles	10,495	(868)	9,627	-	(868)	(868)
5		**Subtotal Intangible**	139,000	(868)	138,132	-	(868)	(868)
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	6,565	-	6,565	-	-	-
9	311.00	Structures and Improvements	22,095	-	22,095	6,096	-	6,096
10	312.00	Preliminary Treatment	453	-	453	63	-	63
11	313.00	Primary Treatment Equipment	-	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	2,575	-	2,575	62	-	62
13	315.00	Tertiary Equipment	-	-	-	-	-	-
14	316.00	Disinfection Equipment	-	-	-	-	-	-
15	317.00	Effluent Lift Station E	1,503	-	1,503	363	-	363
16	318.00	Outfall Line	291	-	291	58	-	58
17	319.00	Sludge, Treatment & Distribution	-	-	-	-	-	-
18	321.00	Influent Lift Station	178	-	178	(8,750)	-	(8,750)
19	322.00	General Treatment Equipment	18,743	-	18,743	(518)	-	(518)
20		**Subtotal Treat & Disc**	52,403	-	52,403	(2,626)	-	(2,626)
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	-	-	-	-	-	-
24	341.00	Structures and Improvements	350,713	-	350,713	1,807	-	1,807
25	342.00	Collection System Lift	1,229,723	-	1,229,723	367,471	-	367,471
26	343.00	Collection Mains	9,886,964	-	9,886,964	4,078,638	-	4,078,638
27	344.00	Force Mains	1,300,266	-	1,300,266	56,701	-	56,701
28	345.00	Discharge Services	2,307,454	-	2,307,454	1,075,077	-	1,075,077
29	348.00	Manholes	2,495,785	-	2,495,785	1,038,722	-	1,038,722
30		**Subtotal Coll.and Infl.**	17,570,906	-	17,570,906	6,618,416	-	6,618,416
31								
32		**General**						
33	389.00	Land and Land Rights	-	-	-	-	-	-
34	390.00	Structures and Improvements	-	-	-	142	-	142
35	391.00	Office Funiture and Equipment	54,203	-	54,203	(12,955)	-	(12,955)
36	391.10	Computer Equipment	-	-	-	-	-	-
37	392.00	Transportation Equipment	2,312	-	2,312	2,312	-	2,312
38	393.00	Stores Equipment	-	-	-	-	-	-
39	394.00	Tools, Shop and Garage	48,675	-	48,675	(18,945)	-	(18,945)
40	395.00	Laboratory Equipment	-	-	-	-	-	-
41	396.00	Power Operated Equipment	-	-	-	-	-	-
42	397.00	Communication Equipment	-	-	-	-	-	-
43	398.00	Miscellaneous Equipment	19,874	(14,679)	5,195	16,755	(14,679)	2,076
44		**Subtotal General**	125,064	(14,679)	110,385	(12,690)	(14,679)	(27,369)
45								
46								
47								
48		TOTAL WASTEWATER PLANT	17,887,373	(15,547)	17,871,826	6,603,100	(15,547)	6,587,553
49								
50								
51								
52								

Company Code: 4004 Business Area: 4505 Sun City Wastewater

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T30100	ORGANIZATION		1974	34	180.2	47.7	3.7778	128	34
T30100	ORGANIZATION		1995	122,339	180.2	152.2	1.1840	144,849	122,339
	T30100	Class Totals		122,373				144,977	122,373
T30200	FRANCH/CONSENTS		1974	477	180.2	47.7	3.7778	1,802	477
T30200	FRANCH/CONSENTS		1976	3,310	180.2	55.8	3.2294	10,689	3,310
T30200	FRANCH/CONSENTS		1995	1,209	180.2	152.2	1.1840	1,431	1,209
T30200	FRANCH/CONSENTS		1997	1,136	180.2	160.6	1.1220	1,274	1,136
	T30200	Class Totals		6,132				15,197	6,132
T30300	MISC INTANGIBLE PLNT		1996	9,626	180.2	156.6	1.1507	11,077	9,626
	T30300	Class Totals		9,626				11,077	9,626
T31000	LAND/LAND RIGHTS		1996	5,656	180.2	156.6	1.1507	6,508	5,656
	T31000	Class Totals		5,656				6,508	5,656
T31100	STRUCT AND IMPROV		1993	4,843	350.0	274.0	1.2774	6,186	6,186
T31100	STRUCT AND IMPROV		1995	289	350.0	298.0	1.1745	339	339
T31100	STRUCT AND IMPROV		1996	303	350.0	303.0	1.1551	350	350
T31100	STRUCT AND IMPROV		1996	16,658	350.0	308.0	1.1364	18,931	18,931

	T31100	Class Totals	22,094				25,807	25,807
T31200	PRE TREATMENT EQ	1999	452	403.0	376.0	1.0718	485	485
	T31200	Class Totals	452				485	485
T31400	SCND TREAMENT EQ	1999	832	403.0	379.0	1.0633	885	885
T31400	SCND TREAMENT EQ	2001	1,742	403.0	403.0	1.0000	1,742	1,742
	T31400	Class Totals	2,575				2,627	2,627
T31700	EFFLUENT STATION	1990	1,246	403.0	314.0	1.2834	1,599	1,599
T31700	EFFLUENT STATION	1991	257	403.0	312.0	1.2917	332	332
	T31700	Class Totals	1,503				1,931	1,931
T31800	OUTFALL LINE	1983	291	403.0	275.0	1.4655	426	426
	T31800	Class Totals	291				426	426
T32100	INFLUENT LIFT STATIO	1990	178	403.0	311.0	1.2958	231	231
	T32100	Class Totals	178				231	231
T32200	GNL TRMNT EQ	1986	4,751	403.0	287.0	1.4042	6,671	6,671

Company Code: 4004 Business Area: 4505 Sun City Wastewater

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T32200	GNL TRMNT EQ		1987	2,049	403.0	292.0	1.3801	2,827	2,827
T32200	GNL TRMNT EQ		1991	1,076	403.0	312.0	1.2917	1,390	1,390
T32200	GNL TRMNT EQ		1995	1,401	403.0	337.0	1.1958	1,676	1,676
T32200	GNL TRMNT EQ		2001	9,465	403.0	403.0	1.0000	9,465	9,465
		T32200	Class Totals	18,743				22,030	22,030
T34100	STRUCT AND IMPROV		1982	26,409	350.0	226.0	1.5487	40,899	40,899
T34100	STRUCT AND IMPROV		1983	9,765	350.0	233.0	1.5021	14,668	14,668
T34100	STRUCT AND IMPROV		1994	74,364	350.0	291.0	1.2027	89,438	89,438
T34100	STRUCT AND IMPROV		1996	3,785	350.0	308.0	1.1364	4,301	4,301
T34100	STRUCT AND IMPROV		1998	9,716	350.0	318.0	1.1006	10,694	10,694
T34100	STRUCT AND IMPROV		2001	226,672	350.0	350.0	1.0000	226,672	226,672
		T34100	Class Totals	350,712				386,674	386,674
T34200	COLL. SYSTEM LIFT		1968	6,753	403.0	74.0	5.4459	36,776	36,776
T34200	COLL. SYSTEM LIFT		1969	239	403.0	77.0	5.2338	1,250	1,250
T34200	COLL. SYSTEM LIFT		1970	351	403.0	83.0	4.8554	1,704	1,704
T34200	COLL. SYSTEM LIFT		1972	2,605	403.0	95.0	4.2421	11,050	11,050
T34200	COLL. SYSTEM LIFT		1973	2,564	403.0	100.0	4.0300	10,332	10,332
T34200	COLL. SYSTEM LIFT		1974	3,800	403.0	122.0	3.3033	12,552	12,552
T34200	COLL. SYSTEM LIFT		1980	3,823	403.0	219.0	1.8402	7,035	7,035
T34200	COLL. SYSTEM LIFT		1984	301	403.0	279.0	1.4444	434	434
T34200	COLL. SYSTEM LIFT		1985	94,499	403.0	282.0	1.4291	135,048	135,048
T34200	COLL. SYSTEM LIFT		1989	2,622	403.0	301.0	1.3389	3,511	3,511

Company Code: 4004 Business Area: 4505 Sun City Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34200	COLL. SYSTEM LIFT	1990	35,911	403.0	311.0	1.2958	46,533	46,533
T34200	COLL. SYSTEM LIFT	1991	1,441	403.0	312.0	1.2917	1,861	1,861
T34200	COLL. SYSTEM LIFT	1991	1,195	403.0	313.0	1.2875	1,538	1,538
T34200	COLL. SYSTEM LIFT	1992	607	403.0	321.0	1.2555	762	762
T34200	COLL. SYSTEM LIFT	1993	96,889	403.0	327.0	1.2324	119,407	119,407
T34200	COLL. SYSTEM LIFT	1994	268,246	403.0	334.0	1.2066	323,665	323,665
T34200	COLL. SYSTEM LIFT	1994	473	403.0	332.0	1.2139	574	574
T34200	COLL. SYSTEM LIFT	1995	322	403.0	337.0	1.1958	386	386
T34200	COLL. SYSTEM LIFT	1995	38,062	403.0	335.0	1.2030	45,788	45,788
T34200	COLL. SYSTEM LIFT	1996	1,261	403.0	342.0	1.1784	1,487	1,487
T34200	COLL. SYSTEM LIFT	1996	31,305	403.0	347.0	1.1614	36,357	36,357
T34200	COLL. SYSTEM LIFT	1997	5,163	403.0	352.0	1.1449	5,911	5,911
T34200	COLL. SYSTEM LIFT	1998	17,139	403.0	367.0	1.0981	18,821	18,821
T34200	COLL. SYSTEM LIFT	1999	859	403.0	376.0	1.0718	921	921
T34200	COLL. SYSTEM LIFT	1999	258,918	403.0	379.0	1.0633	275,307	275,307
T34200	COLL. SYSTEM LIFT	2001	354,368	403.0	403.0	1.0000	354,368	354,368
	T34200	Class Totals	1,229,722				1,453,390	1,453,390
T34300	COLL. MAINS	1960	115,857	324.0	71.0	4.5634	528,701	528,701
T34300	COLL. MAINS	1961	544,406	324.0	73.0	4.4384	2,416,291	2,416,291
T34300	COLL. MAINS	1962	74,173	324.0	75.0	4.3200	320,427	320,427
T34300	COLL. MAINS	1964	4,255	324.0	78.0	4.1538	17,674	17,674
T34300	COLL. MAINS	1965	118,458	324.0	77.0	4.2078	498,447	498,447
T34300	COLL. MAINS	1966	41,673	324.0	78.0	4.1538	173,101	173,101
T34300	COLL. MAINS	1967	133,585	324.0	79.0	4.1013	547,872	547,872

Company Code: 4004 Business Area: 4505 Sun City Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34300	COLL. MAINS	1968	316,088	324.0	80.0	4.0500	1,280,156	1,280,156
T34300	COLL. MAINS	1969	410,417	324.0	83.0	3.9036	1,602,103	1,602,103
T34300	COLL. MAINS	1970	718,520	324.0	87.0	3.7241	2,675,840	2,675,840
T34300	COLL. MAINS	1971	833,463	324.0	95.0	3.4105	2,842,525	2,842,525
T34300	COLL. MAINS	1972	521,041	324.0	98.0	3.3061	1,722,613	1,722,613
T34300	COLL. MAINS	1973	203,070	324.0	100.0	3.2400	657,946	657,946
T34300	COLL. MAINS	1974	725,065	324.0	133.0	2.4361	1,766,330	1,766,330
T34300	COLL. MAINS	1975	471,966	324.0	151.0	2.1457	1,012,697	1,012,697
T34300	COLL. MAINS	1976	336,377	324.0	259.0	1.2510	420,807	420,807
T34300	COLL. MAINS	1977	681,737	324.0	166.0	1.9518	1,330,614	1,330,614
T34300	COLL. MAINS	1978	633,188	324.0	179.0	1.8101	1,146,133	1,146,133
T34300	COLL. MAINS	1979	64,098	324.0	193.0	1.6788	107,607	107,607
T34300	COLL. MAINS	1980	6,580	324.0	209.0	1.5502	10,200	10,200
T34300	COLL. MAINS	1982	24,529	324.0	239.0	1.3556	33,252	33,252
T34300	COLL. MAINS	1983	44,809	324.0	246.0	1.3171	59,017	59,017
T34300	COLL. MAINS	1984	596	324.0	244.0	1.3279	791	791
T34300	COLL. MAINS	1985	122,372	324.0	248.0	1.3065	159,879	159,879
T34300	COLL. MAINS	1986	79,470	324.0	245.0	1.3224	105,091	105,091
T34300	COLL. MAINS	1987	6,456	324.0	252.0	1.2857	8,300	8,300
T34300	COLL. MAINS	1988	256,974	324.0	264.0	1.2273	315,384	315,384
T34300	COLL. MAINS	1989	13,992	324.0	273.0	1.1868	16,606	16,606
T34300	COLL. MAINS	1992	25,332	324.0	277.0	1.1697	29,631	29,631
T34300	COLL. MAINS	1993	23,678	324.0	281.0	1.1530	27,301	27,301
T34300	COLL. MAINS	1993	453,722	324.0	285.0	1.1368	515,791	515,791
T34300	COLL. MAINS	1994	48,189	324.0	291.0	1.1134	53,653	53,653
T34300	COLL. MAINS	1994	25,997	324.0	289.0	1.1211	29,145	29,145
T34300	COLL. MAINS	1995	3,162	324.0	291.0	1.1134	3,520	3,520

Company Code: 4004 Business Area: 4505 Sun City Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34300	COLL. MAINS	1995	859,377	324.0	286.0	1.1329	973,588	973,588
T34300	COLL. MAINS	1996	124,736	324.0	289.0	1.1211	139,842	139,842
T34300	COLL. MAINS	1996	138,872	324.0	292.0	1.1096	154,092	154,092
T34300	COLL. MAINS	1997	7,633	324.0	297.0	1.0909	8,327	8,327
T34300	COLL. MAINS	1997	19,320	324.0	299.0	1.0836	20,935	20,935
T34300	COLL. MAINS	1999	88,990	324.0	313.0	1.0351	92,114	92,114
T34300	COLL. MAINS	1999	297,797	324.0	306.0	1.0588	315,307	315,307
T34300	COLL. MAINS	2000	179,033	324.0	316.0	1.0253	183,563	183,563
T34300	COLL. MAINS	2001	87,903	324.0	324.0	1.0000	87,903	87,903
	T34300	Class Totals	9,886,964				24,411,138	24,411,138
T34400	FORCE MAINS	1968	5,571	324.0	80.0	4.0500	22,562	22,562
T34400	FORCE MAINS	1985	10,846	324.0	248.0	1.3065	14,170	14,170
T34400	FORCE MAINS	1990	2,462	324.0	273.0	1.1868	2,921	2,921
T34400	FORCE MAINS	1993	40,596	324.0	281.0	1.1530	46,808	46,808
T34400	FORCE MAINS	1994	84,886	324.0	291.0	1.1134	94,512	94,512
T34400	FORCE MAINS	1995	42,938	324.0	286.0	1.1329	48,644	48,644
T34400	FORCE MAINS	1999	1,112,965	324.0	306.0	1.0588	1,178,408	1,178,408
	T34400	Class Totals	1,300,266				1,408,028	1,408,028
T34500	DISCHARGE SERVICES	1960	18,301	324.0	71.0	4.5634	83,514	83,514
T34500	DISCHARGE SERVICES	1961	94,254	324.0	73.0	4.4384	418,336	418,336
T34500	DISCHARGE SERVICES	1962	33,335	324.0	75.0	4.3200	144,007	144,007
T34500	DISCHARGE SERVICES	1964	490	324.0	78.0	4.1538	2,035	2,035

Company Code: 4004 Business Area: 4505 Sun City Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34500	DISCHARGE SERVICES	1965	21,156	324.0	77.0	4.2078	89,020	89,020
T34500	DISCHARGE SERVICES	1966	6,853	324.0	78.0	4.1538	28,465	28,465
T34500	DISCHARGE SERVICES	1967	42,816	324.0	79.0	4.1013	175,601	175,601
T34500	DISCHARGE SERVICES	1968	69,273	324.0	80.0	4.0500	280,555	280,555
T34500	DISCHARGE SERVICES	1969	133,146	324.0	83.0	3.9036	519,748	519,748
T34500	DISCHARGE SERVICES	1970	172,506	324.0	87.0	3.7241	642,429	642,429
T34500	DISCHARGE SERVICES	1971	247,134	324.0	95.0	3.4105	842,850	842,850
T34500	DISCHARGE SERVICES	1972	138,864	324.0	98.0	3.3061	459,098	459,098
T34500	DISCHARGE SERVICES	1973	53,891	324.0	100.0	3.2400	174,606	174,606
T34500	DISCHARGE SERVICES	1974	183,919	324.0	133.0	2.4361	448,045	448,045
T34500	DISCHARGE SERVICES	1975	125,103	324.0	151.0	2.1457	268,433	268,433
T34500	DISCHARGE SERVICES	1976	94,532	324.0	259.0	1.2510	118,259	118,259
T34500	DISCHARGE SERVICES	1977	223,888	324.0	166.0	1.9518	436,984	436,984
T34500	DISCHARGE SERVICES	1978	171,623	324.0	179.0	1.8101	310,654	310,654
T34500	DISCHARGE SERVICES	1979	5,357	324.0	193.0	1.6788	8,993	8,993
T34500	DISCHARGE SERVICES	1980	6,028	324.0	209.0	1.5502	9,344	9,344
T34500	DISCHARGE SERVICES	1981	1,002	324.0	224.0	1.4464	1,449	1,449
T34500	DISCHARGE SERVICES	1982	4,010	324.0	239.0	1.3556	5,435	5,435
T34500	DISCHARGE SERVICES	1983	10,749	324.0	246.0	1.3171	14,157	14,157
T34500	DISCHARGE SERVICES	1985	97,303	324.0	248.0	1.3065	127,126	127,126
T34500	DISCHARGE SERVICES	1986	4,898	324.0	245.0	1.3224	6,477	6,477
T34500	DISCHARGE SERVICES	1989	2,506	324.0	273.0	1.1868	2,974	2,974
T34500	DISCHARGE SERVICES	1991	2,867	324.0	277.0	1.1697	3,353	3,353
T34500	DISCHARGE SERVICES	1992	2,710	324.0	277.0	1.1697	3,170	3,170
T34500	DISCHARGE SERVICES	1993	104,105	324.0	285.0	1.1368	118,346	118,346
T34500	DISCHARGE SERVICES	1994	26,344	324.0	291.0	1.1134	29,331	29,331
T34500	DISCHARGE SERVICES	1994	1,053	324.0	289.0	1.1211	1,181	1,181

Company Code: 4004 Business Area: 4505 Sun City Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34500	DISCHARGE SERVICES	1996	38,773	324.0	292.0	1.1096	43,023	43,023
T34500	DISCHARGE SERVICES	1997	12,100	324.0	299.0	1.0836	13,111	13,111
T34500	DISCHARGE SERVICES	1999	93,610	324.0	306.0	1.0588	99,114	99,114
T34500	DISCHARGE SERVICES	2000	48,290	324.0	316.0	1.0253	49,511	49,511
T34500	DISCHARGE SERVICES	2001	370	324.0	320.0	1.0125	374	374
T34500	DISCHARGE SERVICES	2001	14,290	324.0	324.0	1.0000	14,290	14,290
	T34500	Class Totals	2,307,454				5,993,419	5,993,419
T34800	MANHOLES	1960	11,157	350.0	59.0	5.9322	66,185	66,185
T34800	MANHOLES	1961	72,537	350.0	59.0	5.9322	430,303	430,303
T34800	MANHOLES	1962	21,803	350.0	60.0	5.8333	127,183	127,183
T34800	MANHOLES	1964	1,227	350.0	63.0	5.5556	6,816	6,816
T34800	MANHOLES	1965	29,309	350.0	64.0	5.4688	160,285	160,285
T34800	MANHOLES	1966	12,197	350.0	65.0	5.3846	65,675	65,675
T34800	MANHOLES	1967	35,457	350.0	66.0	5.3030	188,028	188,028
T34800	MANHOLES	1968	76,082	350.0	69.0	5.0725	385,925	385,925
T34800	MANHOLES	1969	105,278	350.0	74.0	4.7297	497,933	497,933
T34800	MANHOLES	1970	175,352	350.0	80.0	4.3750	767,165	767,165
T34800	MANHOLES	1971	214,019	350.0	88.0	3.9773	851,217	851,217
T34800	MANHOLES	1972	126,259	350.0	93.0	3.7634	475,163	475,163
T34800	MANHOLES	1973	66,214	350.0	100.0	3.5000	231,749	231,749
T34800	MANHOLES	1974	174,820	350.0	121.0	2.8926	505,684	505,684
T34800	MANHOLES	1975	99,865	350.0	136.0	2.5735	257,002	257,002
T34800	MANHOLES	1976	104,021	350.0	140.0	2.5000	260,052	260,052
T34800	MANHOLES	1977	193,342	350.0	149.0	2.3490	454,160	454,160

Company Code: 4004 Business Area: 4505 Sun City Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34800	MANHOLES	1978	188,699	350.0	164.0	2.1341	402,702	402,702
T34800	MANHOLES	1979	25,578	350.0	182.0	1.9231	49,189	49,189
T34800	MANHOLES	1980	7,414	350.0	207.0	1.6908	12,535	12,535
T34800	MANHOLES	1981	7,024	350.0	220.0	1.5909	11,174	11,174
T34800	MANHOLES	1982	20,853	350.0	226.0	1.5487	32,295	32,295
T34800	MANHOLES	1983	21,276	350.0	233.0	1.5021	31,958	31,958
T34800	MANHOLES	1984	5,775	350.0	238.0	1.4706	8,492	8,492
T34800	MANHOLES	1985	30,287	350.0	241.0	1.4523	43,985	43,985
T34800	MANHOLES	1986	19,043	350.0	246.0	1.4228	27,094	27,094
T34800	MANHOLES	1988	43,201	350.0	255.0	1.3725	59,294	59,294
T34800	MANHOLES	1989	8,109	350.0	250.0	1.4000	11,353	11,353
T34800	MANHOLES	1992	1,957	350.0	259.0	1.3514	2,644	2,644
T34800	MANHOLES	1992	1,559	350.0	266.0	1.3158	2,052	2,052
T34800	MANHOLES	1993	6,713	350.0	274.0	1.2774	8,576	8,576
T34800	MANHOLES	1993	158,800	350.0	277.0	1.2635	200,644	200,644
T34800	MANHOLES	1994	52,091	350.0	286.0	1.2238	63,749	63,749
T34800	MANHOLES	1994	3,378	350.0	291.0	1.2027	4,062	4,062
T34800	MANHOLES	1995	10,206	350.0	298.0	1.1745	11,986	11,986
T34800	MANHOLES	1996	59,851	350.0	303.0	1.1551	69,134	69,134
T34800	MANHOLES	1996	53,013	350.0	308.0	1.1364	60,244	60,244
T34800	MANHOLES	1997	5,661	350.0	310.0	1.1290	6,391	6,391
T34800	MANHOLES	1997	3,757	350.0	314.0	1.1146	4,188	4,188
T34800	MANHOLES	1999	33,917	350.0	325.0	1.0769	36,526	36,526
T34800	MANHOLES	1999	125,000	350.0	324.0	1.0802	135,025	135,025
T34800	MANHOLES	2000	41,129	350.0	338.0	1.0355	42,589	42,589
T34800	MANHOLES	2001	42,545	350.0	350.0	1.0000	42,545	42,545

	T34800	Class Totals	2,495,785				7,110,974	7,110,974
T39100	OFFICE FURN/EQUIP	1998	8,671	180.2	163.6	1.1015	9,551	9,551
T39100	OFFICE FURN/EQUIP	2000	47,249	180.2	173.1	1.0410	49,186	49,186
T39100	OFFICE FURN/EQUIP	2001	-1,717	180.2	180.2	1.0000	-1,717	-1,717
	T39100	Class Totals	54,202				57,020	57,020
T39200	TRANSPORT EQUIP	1993	2,312	180.2	145.5	1.2385	2,863	2,863
	T39200	Class Totals	2,312				2,863	2,863
T39400	TLS/SHOP/GAR EQUIP	1968	3,980	180.2	34.6	5.2081	20,728	20,728
T39400	TLS/SHOP/GAR EQUIP	1983	1,527	180.2	99.0	1.8202	2,779	2,779
T39400	TLS/SHOP/GAR EQUIP	1988	2,875	180.2	117.7	1.5310	4,401	4,401
T39400	TLS/SHOP/GAR EQUIP	1990	3,810	180.2	129.4	1.3926	5,305	5,305
T39400	TLS/SHOP/GAR EQUIP	1991	79	180.2	136.2	1.3231	104	104
T39400	TLS/SHOP/GAR EQUIP	1991	30,115	180.2	136.2	1.3231	39,845	39,845
T39400	TLS/SHOP/GAR EQUIP	1994	6,289	180.2	148.7	1.2118	7,621	7,621
	T39400	Class Totals	48,675				80,786	80,786
T39800	MISC EQUIP	1980	309	180.2	83.3	2.1633	668	668
T39800	MISC EQUIP	1999	4,886	180.2	167.8	1.0739	5,247	5,247
	T39800	Class Totals	5,195				5,915	5,915

Company Code:	4004	Business Area:	4505	17,870,917	41,141,512	41,107,539

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 1
Witness: Bourassa

Line No.		Direct Test Year Adjusted Results	Label	Adjustment	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	**Revenues**						
2	Flat Rate Revenues	$ 5,085,481			$ 5,085,481	316,400	$ 5,401,881
3	Measured Revenues	-			-		-
4	Other Wastewater Revenues	2,859			2,859		2,859
5		$ 5,088,340		$ -	$ 5,088,340	$ 316,400	$ 5,404,740
6	**Operating Expenses**						
7	Salaries and Wages	$ 160,653	1/6	(53,473)	$ 107,181		$ 107,181
8	Purchased Wastewater Treatment	992,447			992,447		992,447
9	Purchased Power	1,510			1,510		1,510
10	Fuel for Power Production	-			-		-
11	Chemicals	-			-		-
12	Materials and Supplies	105,696			105,696		105,696
13	Repairs and Maintenance	-			-		-
14	Office Supplies and Expense	204,642	7	(57,504)	147,138		147,138
15	Outside Services	3,123			3,123		3,123
16	Service Company Charges	522,586	10	(17,466)	505,120		505,120
17	Water Testing	-					-
18	Rents	21,265			21,265		21,265
19	Transportation Expenses	-			-		-
20	Insurance - General Liability	36,400	8	(5,494)	30,906		30,906
21	Insurance - Health and Life	-			-		-
22	Regulatory Commission Expense - Rate Case	33,583			33,583		33,583
23	Miscellaneous Expense	145,130	9	415	145,545		145,545
24	Depreciation Expense	514,852	3	(7,009)	507,843		507,843
25	Taxes Other Than Income	7,754	2	(1,805)	5,949		5,949
26	Property Taxes	193,701	4	(3,639)	190,062		190,062
27	Income Tax	216,390		158,615	375,005		497,132
28	Tolleson Wastewater User Fees	818,091			818,091		818,091
29	**Total Operating Expenses**	$ 3,977,823		$ 12,639	$ 3,990,462	$ -	$ 4,112,589
30	**Operating Income**	$ 1,110,517		$ (12,639)	$ 1,097,877	$ 316,400	$ 1,292,150
31	**Other Income (Expense)**						
32	Interest Income	-			-		-
33	Other income	-			-		-
34	Interest Expense	(766,294)	5	264,956	(501,338)		(501,338)
35	Other Expense	-			-		-
36	Gain/Loss Sale of Fixed Assets	-			-		-
37	**Total Other Income (Expense)**	$ (766,294)		$ 264,956	$ (501,338)	$ -	$ (501,338)
38	**Net Profit (Loss)**	$ 344,223		$ 252,316	$ 596,539	$ 316,400	$ 790,812
39							
40	SUPPORTING SCHEDULES:					RECAP SCHEDULES:	
41	Rebuttal C-2					Rebuttal A-1	
42							

Arizona American
Summary of Rebuttal Adjustments
Test Year December 31, 2001

Exhibit
Rebuttal Schedule C-2
Witness: Bourassa
Page1

	Water/ Sewer Label	Description	Sun City Wastewater
Revenues			
Revenues		None	
Other Revenues		None	
			$ -
Operating Expenses			
Salaries and Wages	1	Adjust to Actual 2002 Wages	$ (19,206)
	6	Adjust to Actual 2002 Additional (Corporate)	(34,266)
Purchased Water	11	Adjust to annualized 2001 qty ordered	
Purchased Wastewater Treatment		None	
Purchased Power		None	
Fuel for Power Production			
Chemicals		None	
Materials ans Supplies		None	
Repairs and Maintenance		None	
Office Supplies and Expense	7	Adjust to Actual 2002 Additional (Corporate)	(57,504)
Outside Services			
Service Company Charges	10	Adjust to Actual 2002 Service Company Charges	(17,466)
Water Testing		None	
Rents		None	
Transportation Expenses			
Insurance - General Liability	8	Adjust to Actual 2002 Additional (Corporate)	(5,494)
Insurance - Health and Life		None	
Rate Case Expense		None	
Miscellaneous Expense	9	Adjust to Actual 2002 Additional (Corporate)	415
Depreciation Expense	3	Depreciation Expense	(7,009)
Taxes Other Than Income	2	Adjust to 2002 PR Tax based on Actual Wages	(1,805)
Property Taxes	4	Property Taxes	(3,639)
Income Tax			158,615
Tolleson Wastewater User Fees		None	
Total Operating Expenses			$ 12,639
Operating Income			$ (12,639)

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line No.		Amount
1	Projected Salaries & Wages and Related Expenses	
2		
3	Actual 2002 Wages and Salaries	
4	0 Salaries & Wages	$ 69,343
5		
6	Direct Filing Proposed Wages and Salaries	
7	0 Salaries & Wages	88,549
8		
9	Increase (Decrease)	$ (19,206)
10		
11	Adjustment to Revenues and/or Expenses	$ (19,206)
12		
13		
14		
15		

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line No.		Amount
1	Projected Salaries & Wages and Related Expenses	
2		
3	PR Taxes Based on Actual 2002 Wages and Salaries	
4	# Taxes Other Than Income	5,949
5		
6	Direct Filing Proposed PR Taxes	
7	# Taxes Other Than Income	7,754
8		
9	Increase (Decrease)	$ (1,805)
10		
11	Adjustment to Revenues and/or Expenses	$ (1,805)
12		
13		
14		
15		

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Depreciation Expense

Line No.	Account No.	Description	Rebuttak Original Cost	Rate	Depreciation Expense
5		**Intangible**			
6	301.00	Organization	$ 122,373	0.00%	$ -
7	302.00	Franchises	6,132	0.00%	-
8	303.00	Miscellaneous Intangibles	9,627	0.00%	-
9		**Subtotal Intangible**	$ 138,132		$ -
10					
11		**Treatment & Discharge**			
12	310.00	Land and Land Rights	$ 6,565	0.00%	$ -
13	311.00	Structures and Improvements	53,532	2.50%	1,338
14	312.00	Preliminary Treatment	453	0.00%	-
15	313.00	Primary Treatment Equipment	-	0.00%	-
16	314.00	Secondary Treatment Equipment	2,575	2.52%	65
17	315.00	Tertiary Equipment	-	0.00%	-
18	316.00	Disinfection Equipment	-	0.00%	-
19	317.00	Effluent Lift Station E	1,503	2.00%	30
20	318.00	Outfall Line	291	2.00%	6
21	319.00	Sludge, Treatment & Distribution	-	2.50%	-
22	321.00	Influent Lift Station	178	2.00%	4
23	322.00	General Treatment Equipment	18,743	2.00%	375
24		**Subtotal Treatment & Discharge**	$ 83,840		$ 1,818
25					
26		**Collection and Influent**			
27	340.00	Land and Land Rights	$ -	0.00%	$ -
28	341.00	Structures and Improvements	350,713	2.00%	7,014
29	342.00	Collection System Lift	1,229,723	8.40%	103,297
30	343.00	Collection Mains	12,384,369	2.04%	252,641
31	344.00	Force Mains	1,300,266	2.07%	26,916
32	345.00	Discharge Services	2,307,454	2.04%	47,072
33	348.00	Manholes	-	2.03%	-
34		**Subtotal Collection and Influent**	$ 17,572,526		$ 436,940
35					
36		**General**			
37	389.00	Land and Land Rights	$ 1,108	0.00%	$ -
38	390.00	Structures and Improvements	760,473	1.68%	12,782
39	391.00	Office Funiture and Equipment	365,090	4.55%	16,594
40	391.10	Computer Equipment	287,585	4.55%	13,071
41	392.00	Transportation Equipment	408,123	25.00%	102,031
42	393.00	Stores Equipment	6,523	3.92%	256
43	394.00	Tools, Shop and Garage	93,334	4.14%	3,860
44	395.00	Laboratory Equipment	29,565	3.71%	1,097
45	396.00	Power Operated Equipment	27,169	5.14%	1,398
46	397.00	Communication Equipment	164,710	10.28%	16,928
47	398.00	Miscellaneous Equipment	59,482	4.98%	2,962
48		**Subtotal General**	$ 2,203,163		$ 170,978
49					
50					
51		Youngtown Plant *	(96,727)	3.06%	(2,964)
52		TOTALS	$ 19,900,933	3.06%	$ 606,771
53					
54	Tolleson Trickling Filter		$ 500,000	3.06%	15,319
55					
56	Amortization of Deferred Regulatory Assets		$ 145,771	3.06%	4,466
57					
58	Less: Amortization of Contributions		$ 1,187,139	10.00%	(118,714)
59	Rebuttal Depreciation Expense				$ 507,843
60					
61	Direct Filing Depreciation Expense				514,852
62					
63	Increase (decrease) in Depreciation Expense				(7,009)
64					
65	Adjustment to Revenues and/or Expenses				$ (7,009)
66					

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line No.		
1	Adjust Property Taxes to Reflect Proposed Revenues:	
2		
3	Rebuttal Adjusted Revenues in year ended 12/31/01	$ 5,088,340
4	Rebuttal Adjusted Revenues in year ended 12/31/01	5,088,340
5	Proposed Revenues	5,404,740
6	Average of three year's of revenue	$ 5,193,806
7	Average of three year's of revenue, times 2	10,387,613
8	Add:	
9	Construction Work in Progess at 10%	
10	Deduct:	
11	Book Value of Transportation Equipment	408,123
12	Book Value of Transportation Equipment (proforma)	-
13	Total Book Value of Transportation Equipment	$ 408,123
14		
15	Full Cash Value	$ 9,979,490
16	Assessment Ratio	25%
17	Assessed Value	2,494,872
18	Property Tax Rate	7.618094%
19		
20	Property Tax	190,062
21	Tax on Parcels	0
22		
23	Total Rebuttal Property Tax at Proposed Rates	$ 190,062
24	Direct Filing Proposed Property Taxes	193,701
25	Increase (Decrease) in Property Taxes	$ (3,639)
26		
27		
28	Adjustment to Revenues and/or Expenses	$ (3,639)
29		
30		

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line No.		
1	Interest Synchronization with Rate Base	
2		
3	Rebuttal Fair Value Rate Base	$17,192,669
4	Weigted Cost of Debt from Schedule D-1	2.92%
5	Rebuttal Synchronized Interest Expense	501,338
6	Direct Filing Interest Expense	766,294
7	Increase in Interest Expense	$ (264,956)
8		
9	Adjustment to Revenues and/or Expense	$ (264,956)
10		
11		

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
Page 7
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Wages Expense (Corporate)	$	37,838
5			
6	Direct Filing Proposed Additonal Wages Expense (Corporat	$	72,104
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(34,266)
10			
11	Adjustment to Revenue and/or Expense	$	(34,266)
12			
13			
14			
15			

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

Line No.		
1	Projected Additional Expenses	
2		
3		
4	Actual 2002 Additional Office Expense (Corporate)	$ 154,737
5		
6	Direct Filing Proposed Additonal Office Expense (Corporate	212,241
7		
8		
9	Increase (Decrease) in Addtional Expenses	$ (57,504)
10		
11	Adjustment to Revenue and/or Expense	$ (57,504)
12		
13		
14		
15		

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
Page 9
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Insurance Expense (Corporate)	$	29,467
5			
6	Direct Filing Proposed Additonal Insurance Expense (Corp		34,961
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(5,494)
10			
11	Adjustment to Revenue and/or Expense	$	(5,494)
12			
13			
14			
15			

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 9

Exhibit
Rebuttal Schedule C-2
Page 10
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Misc. Expense (Corporate)	$	1,663
5			
6	Direct Filing Proposed Additonal Misc. Expense (Corporate		1,249
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	415
10			
11	Adjustment to Revenue and/or Expense	$	415
12			
13			
14			
15			

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 10

Exhibit
Schedule C-2
Page 11
Witness: Bourassa

Line No.			
1	Service Company Charges		
2			
3	Total 2002 Charges	$ 4,981,460	
4	Allocation Factor (4 factor Formula)	0.1014	
5	Total Charges		$ 505,120
6			
7			
8	Direct Filing Proposed Charges	$ 5,153,711	
9	Allocation Factor (4 factor Formula)	0.1014	
10	Total Charges		522,586
11			
12			
13	Adjustment to Revenues and/or Expenses		$ (17,466)
14			
15			
16			
17			

Arizona American - Sun City Wastewater
Test Year Ended December 31, 2001
Summary of Cost of Capital

Exhibit
Rebuttal Schedule D-1
Page 1
Witness: Stephenson

Line No.	Item of Capital	End of Test Year Percent of Total	(e) Cost Rate	Weighted Cost	End of Projected Year Percent of Total	(e) Cost Rate	Weighted Cost
1	Long-Term Debt	60.00%	4.86%	2.92%	60.00%	4.86%	2.92%
2							
3	Stockholder's Equity (c)	40.00%	11.50%	4.60%	40.00%	11.50%	4.60%
4							
5	Totals	100.00%		7.52%	100.00%		7.52%
6							
7							
8	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

SUN CITY WEST
WATER

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

Line No.						
1	Fair Value Rate Base				$	15,432,917
2						
3	Adjusted Operating Income					412,624
4						
5	Current Rate of Return					2.67%
6						
7	Required Operating Income				$	1,159,938
8						
9	Required Rate of Return on Fair Value Rate Base					7.52%
10						
11	Operating Income Deficiency				$	747,314
12						
13	Gross Revenue Conversion Factor					1.6286
14						
15	Increase in Gross Revenue					
16	Requirement				$	1,217,102
17						

18	Customer		Present	Proposed	Dollar	Percent
19	Classification		Rates	Rates	Increase	Increase
20	5/8 Inch	Residential	$ 2,075,364	$ 2,832,860	$ 757,496	36.50%
21	3/4 Inch	Residential	409	559	150	36.57%
22	1 Inch	Residential	40,107	54,773	14,666	36.57%
23	1.5 Inch	Residential	511,059	698,068	187,009	36.59%
24	2 Inch	Residential	162,940	222,568	59,628	36.59%
25	3 Inch	Residential	-	-	-	0.00%
26	4 Inch	Residential	117,032	159,874	42,842	36.61%
27	5/8 Inch	Commercial	9,572	13,066	3,494	36.50%
28	3/4 Inch	Commercial	-	-	-	0.00%
29	1 Inch	Commercial	34,155	46,648	12,494	36.58%
30	1.5 Inch	Commercial	74,345	101,550	27,205	36.59%
31	2 Inch	Commercial	208,910	285,370	76,459	36.60%
32	3 Inch	Commercial	51,125	69,836	18,710	36.60%
33	4 Inch	Commercial	11,618	15,871	4,253	36.60%
34	6 Inch	Commercial	4,923	6,724	1,802	36.60%
35	4 Inch	Fire Protection	4,140	5,654	1,514	36.57%
36	6 Inch	Fire Protection	11,745	16,041	4,296	36.58%
37	8 Inch	Fire Protection	5,040	6,883	1,843	36.57%
38	Miscellaneous Revenues		37,640	37,640	-	0.00%
39	Subtotal Water Revenues		$ 3,360,124	$ 4,573,984	$ 1,213,860	36.13%

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 2
Witness: Bourassa

Line No.	Customer Classification		Present Rates	Proposed Rates	Dollar Increase	Percent Increase
1	**Revenue Annualization**					
2	5/8 Inch	Residential	$ 3,500	$ 4,777	$ 1,277	36.49%
3	3/4 Inch	Residential	-	-	-	0.00%
4	1.5 Inch	Residential	278	380	102	36.59%
5	2 Inch	Residential	(901)	(1,231)	(330)	36.59%
6	3 Inch	Residential	-	-	-	0.00%
7	4 Inch	Residential	-	-	-	0.00%
8	5/8 Inch	Commercial	(246)	(336)	(90)	36.48%
9	3/4 Inch	Commercial	-	-	-	0.00%
10	1 Inch	Commercial	(440)	(601)	(161)	36.58%
11	1.5 Inch	Commercial	1,014	1,385	371	36.59%
12	2 Inch	Commercial	5,600	7,649	2,049	36.60%
13	3 Inch	Commercial	(4,055)	(5,539)	(1,484)	36.60%
14	4 Inch	Commercial	-	-	-	0
15	6 Inch	Commercial	-	-	-	0
16	4 Inch	Fire Protection	540	737	197	36.57%
17	6 Inch	Fire Protection	135	184	49	36.58%
18	8 Inch	Fire Protection	0	0.00	0	0.00%
19	Total Revenue Annualization		$ 5,424	$ 7,406	$ 1,982	36.53%
20	Total Revenues		$ 3,365,549	$ 4,581,390	$ 1,215,842	36.13%
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37	SUPPORTING SCHEDULES:					
38	Rebuttal B-1					
39	Rebuttal C-1					
40	Rebuttal D-1					
41	Rebuttal H-1					
42						

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Summary of Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	RCND Rate base	Fair Value Rate base (RCND Only)
1				
2	Gross Utility Plant in Service	$ 31,385,527	$ 41,995,079	$ 41,995,079
3	Less: Accumulated Depreciation	6,197,918	9,002,193	9,002,193
4				
5	Net Utility Plant in Service	$ 25,187,610	$ 32,992,886	$ 32,992,886
6				
7	Less:			
8	Advances in Aid of			
9	Construction	12,151,160	16,258,734	16,258,734
10	Contributions in Aid of			
11	Construction - Net of amortization	971,578	1,300,010	1,300,010
12	Customer Meter Deposits	1,225	1,225	1,225
13	Deferred Income Taxes & Credits	-	-	-
14	Investment tax Credits	-	-	-
15	Plus:			
16	Unamortized Finance			
17	Charges	-	-	-
18	Deferred Tax Assets	-	-	-
19	Allowance for Working Capital	-	-	-
20	Citizens Acquisition Adjustment	8,101,902	-	-
21				
22	Total Rate Base	$ 20,165,548	$ 15,432,917	$ 15,432,917
23				
24				
25				
26	SUPPORTING SCHEDULES:			RECAP SCHEDULES:
27	Rebuttal B-2			Rebuttal A-1
28	Rebuttal B-3			
29				
30				
31				

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 31,153,379	(1)	232,149	$ 31,385,527
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	6,211,024	(2)	(13,106)	6,197,918
8					
9	Net Utility Plant				
10	in Service	$ 24,942,355			$ 25,187,610
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only	12,151,160			12,151,160
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	971,578			971,578
18	Purposes Only)				
19	Customer Meter Deposits	1,225			1,225
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Unamortized Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	8,164,652	(3)	(62,749)	8,101,902
28					
29	Total	$ 19,983,043			$ 20,165,548
30					
31					
32	(1) See Rebuttal B-2, Page 2				
33	(2) See Rebuttal B-2, Page 3				
34	(3) See Rebuttal B-2, Page 4				
35					
36					
37					
38					
39					
40					
41					
42					

Arizona American - Sun City West Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 20,086.28	$ -	$ 20,086.28	$ -	$ -	$ -
3	302.00	Franchises	1,588	-	1,588	-	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	$ 21,674.28	$ -	$ 21,674.28	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	11,651	$ -	$ 11,650.78	$ -	$ -	$ -
9	311.00	Structures and Improvements	357,725	8,366	366,092	105,685	-	105,685
10	312.00	Collecting and Impounding Res.	-	-	-	-	-	-
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	1,370,011	(62,960)	1,307,051	313,577	-	313,577
13		**Subtotal Source of Supply**	$ 1,739,387	$ (54,594)	$ 1,684,793	$ 419,262	$ -	$ 419,262
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 44,957	$ -	$ 44,957	$ -	$ -	$ -
17	321.00	Structures and Improvements	231,439	-	231,439	72,188	-	72,188
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	5,030,298	(13,510)	5,016,788	2,138,883	(1,267)	2,137,616
20	326.00	Diesel Pumping Equipment	4,505	-	4,505	1,528	-	1,528
21	328.10	Gas Engine Pumping Equipment	1,764	-	1,764	551	-	551
22		**Subtotal Pumping**	$ 5,312,963	$ (13,510)	$ 5,299,453	$ 2,213,150	$ (1,267)	$ 2,211,883
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
26	331.00	Structures and Improvements	38,357	-	38,357	6,456	-	6,456
27	332.00	Water Treatment Equipment	149,687	463	150,150	(6,223)	-	(6,223)
28		**Subtotal Water Treatment**	$ 188,045	$ 463	$ 188,508	$ 232	$ -	$ 232
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
32	341.00	Structures and Improvements	-	-	-	-	-	-
33	342.00	Distribution, Reservoirs, & ST	798,143	(28,209)	769,934	156,455	-	156,455
34	343.00	Transmission and Distribution	11,777,852	(26,963)	11,750,888	2,617,129	(1,315)	2,615,815
35	344.00	Fire Mains	169	-	169	22	-	22
36	345.00	Services	6,622,166	(1,767)	6,620,399	(269,477)	(1,767)	(271,244)
37	346.00	Meters	1,678,135	-	1,678,135	353,499	-	353,499
38	348.00	Hydrants	1,682,898	3,530	1,686,428	459,176	-	459,176
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Transmission and Distribution**	$ 22,559,363	$ (53,409)	$ 22,505,953	$ 3,316,804	$ (3,081)	$ 3,313,722
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ 817	$ -	$ 817	$ -	$ -	$ -
44	390.00	Structures and Improvements	560,392	-	560,392	52,175	-	52,175
45	391.00	Office Funiture and Equipment	286,228	(17,194)	269,035	60,965	-	60,965
46	391.10	Computer Equipment	317,767	(101,720)	216,047	(71,024)	(6,163)	(77,187)
47	392.00	Transportation Equipment	318,346	39,911	358,256	215,881	-	215,881
48	393.00	Stores Equipment	4,807	-	4,807	1,312	-	1,312
49	394.00	Tools, Shop and Garage	68,778	-	68,778	3,446	-	3,446
50	395.00	Laboratory Equipment	21,787	-	21,787	3,910	-	3,910
51	396.00	Power Operated Equipment	20,133	(112)	20,021	7,773	(62)	7,711
52	397.00	Communication Equipment	118,526	2,849	121,375	57,245	-	57,245
53	398.00	Miscellaneous Equipment	46,365	(2,533)	43,832	22,574	(2,533)	20,042
54		**Subtotal General**	$ 1,763,945	$ (78,799)	$ 1,685,146	$ 354,257	$ (8,757)	$ 345,500
55								
56								
57								
58		ADFUC adjustment 3/05	(431,998)	431,998	-	(92,681)		(92,681)
59		TOTAL WATER PLANT	$ 31,153,379	$ 232,149	$ 31,385,527	$ 6,211,024	$ (13,106)	$ 6,197,918
60								
61		SUPPORTING SCHEDULES:						
62		Rebuttal B-2, page 2a, 2b, 3a, 3b						
63								
64								

Arizona American
Sun City West Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Blank Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 20,086					-
3	302.00	Franchises	1,588					-
4	303.00	Miscellaneous Intangibles	-					-
5		**Subtotal Intangible**	$ 21,674	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						-
8	310.00	Land and Land Rights	$ 11,651					-
9	311.00	Structures and Improvements	357,725					8,366
10	312.00	Collecting and Impounding Res.	-					-
11	313.00	Lakes, Rivers, Other Intakes	-					-
12	314.00	Wells and Springs	1,370,011					(62,960)
13		**Subtotal Source of Supply**	$ 1,739,387	$ -	$ -	$ -	$ -	$ (54,594)
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 44,957					-
17	321.00	Structures and Improvements	231,439					-
18	323.00	Other Power Production	-					-
19	325.00	Electric Pumping Equipment	5,030,298		(11,175)			(2,335)
20	326.00	Diesel Pumping Equipment	4,505					-
21	328.10	Gas Engine Pumping Equipment	1,764					-
22		**Subtotal Pumping**	$ 5,312,963	$ -	$ (11,175)	$ -	$ -	$ (2,335)
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					-
26	331.00	Structures and Improvements	38,357					-
27	332.00	Water Treatment Equipment	149,687					463
28		**Subtotal Water Treatment**	$ 188,045	$ -	$ -	$ -	$ -	$ 463
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -					-
32	341.00	Structures and Improvements	-					-
33	342.00	Distribution, Reservoirs, & ST	798,143					(28,209)
34	343.00	Transmission and Distribution	11,777,852		(6,343)			(20,621)
35	344.00	Fire Mains	169					-
36	345.00	Services	6,622,166		(1,767)			-
37	346.00	Meters	1,678,135					-
38	348.00	Hydrants	1,682,898					3,530
39	349.00	Other Transmission & Distribution	-					-
40		**Subtotal Transmission and Distributio**	$ 22,559,363	$ -	$ (8,109)	$ -	$ -	$ (45,300)
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ 817					-
44	390.00	Structures and Improvements	560,392					-
45	391.00	Office Funiture and Equipment	286,228					(17,194)
46	391.10	Computer Equipment	317,767					-
47	392.00	Transportation Equipment	318,346					39,911
48	393.00	Stores Equipment	4,807					-
49	394.00	Tools, Shop and Garage	68,778					-
50	395.00	Laboratory Equipment	21,787					-
51	396.00	Power Operated Equipment	20,133					-
52	397.00	Communication Equipment	118,526					2,849
53	398.00	Miscellaneous Equipment	46,365					-
54		**Subtotal General**	$ 1,763,945	$ -	$ -	$ -	$ -	$ 25,566
55								
56								
57			-					
58			(431,998)					
59		TOTAL WATER PLANT	$ 31,153,379	$ -	$ (19,284)	$ -	$ -	$ (76,200)
60								

61	ADJ #		Reference
62	1	Plant Not Used and Useful	ACC Staff
63	2	Unidentified Plant	ACC Staff
64	3	Mis-posted Plant	ACC Staff
65	4	Plant Removed by Prev. Deci	ACC Staff
66	5	Post Test Year Plant	ACC Staff
67			

Arizona American
Sun City West Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Blank Acquisition Adj Adjustment 7	Common Plant Adjustments Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Original Cost
1		**Intangible**							
2	301.00	Organization						$ -	$ 20,086
3	302.00	Franchises						-	1,588
4	303.00	Miscellaneous Intangibles						-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ 21,674
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights						$ -	$ 11,651
9	311.00	Structures and Improvements						8,366	366,092
10	312.00	Collecting and Impounding Res.						-	-
11	313.00	Lakes, Rivers, Other Intakes						-	-
12	314.00	Wells and Springs						(62,960)	1,307,051
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ -	$ -	$ (54,594)	$ 1,684,793
14									
15		**Pumping**							
16	320.00	Land and Land Rights						$ -	$ 44,957
17	321.00	Structures and Improvements						-	231,439
18	323.00	Other Power Production						-	-
19	325.00	Electric Pumping Equipment						(13,510)	5,016,788
20	326.00	Diesel Pumping Equipment						-	4,505
21	328.10	Gas Engine Pumping Equipment						-	1,764
22		**Subtotal Pumping**	$ -	$ -	$ -	$ -	$ -	$ (13,510)	$ 5,299,453
23									
24		**Water Treatment**						$ -	
25	330.00	Land and Land Rights						-	$ -
26	331.00	Structures and Improvements						-	38,357
27	332.00	Water Treatment Equipment						463	150,150
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ -	$ -	$ 463	$ 188,508
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights						$ -	$ -
32	341.00	Structures and Improvements						-	-
33	342.00	Distribution, Reservoirs, & ST						(28,209)	769,934
34	343.00	Transmission and Distribution						(26,963)	11,750,888
35	344.00	Fire Mains						-	169
36	345.00	Services						(1,767)	6,620,399
37	346.00	Meters						-	1,678,135
38	348.00	Hydrants						3,530	1,686,428
39	349.00	Other Transmission & Distribution						-	-
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ -	$ -	$ (53,409)	$ 22,505,953
41									
42		**Allocated Common Plant**							
43	389.00	Land and Land Rights			-			$ -	$ 817
44	390.00	Structures and Improvements			-			-	560,392
45	391.00	Office Funiture and Equipment			-			(17,194)	269,035
46	391.10	Computer Equipment			(101,720)			(101,720)	216,047
47	392.00	Transportation Equipment			-			39,911	358,256
48	393.00	Stores Equipment			-			-	4,807
49	394.00	Tools, Shop and Garage			-			-	68,778
50	395.00	Laboratory Equipment			-			-	21,787
51	396.00	Power Operated Equipment			(112)			(112)	20,021
52	397.00	Communication Equipment			-			2,849	121,375
53	398.00	Miscellaneous Equipment			(2,533)			(2,533)	43,832
54		**Subtotal General**	$ -	$ -	$ (104,365)	$ -	$ -	$ (78,799)	$ 1,685,146
55									
56									
57								-	-
58			431,998					431,998	-
59		TOTAL WATER PLANT	$ 431,998	$ -	$ (104,365)	$ -	$ -	$ 232,149	$ 31,385,527
60									
61									
62									
63									
64									
65									
66									
67									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American
Sun City West Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Blank Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**			-			
2	301.00	Organization	$ -		-			
3	302.00	Franchises	-		-			
4	303.00	Miscellaneous Intangibles	-		-			
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ -		-			
9	311.00	Structures and Improvements	105,685		-			
10	312.00	Collecting and Impounding Res.	-		-			
11	313.00	Lakes, Rivers, Other Intakes	-		-			
12	314.00	Wells and Springs	313,577		-			
13		**Subtotal Source of Supply**	$ 419,262	$ -	$ -	$ -	$ -	$ -
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ -		-			
17	321.00	Structures and Improvements	72,188		-			
18	323.00	Other Power Production	-		-			
19	325.00	Electric Pumping Equipment	2,138,883		(1,267)			
20	326.00	Diesel Pumping Equipment	1,528		-			
21	328.10	Gas Engine Pumping Equipment	551		-			
22		**Subtotal Pumping**	$ 2,213,150	$ -	$ (1,267)	$ -	$ -	$ -
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -		-			
26	331.00	Structures and Improvements	6,456		-			
27	332.00	Water Treatment Equipment	(6,223)		-			
28		**Subtotal Water Treatment**	$ 232	$ -	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -		-			
32	341.00	Structures and Improvements	-		-			
33	342.00	Distribution, Reservoirs, & ST	156,455		-			
34	343.00	Transmission and Distribution	2,617,129		(1,315)			
35	344.00	Fire Mains	22					
36	345.00	Services	(269,477)		(1,767)			
37	346.00	Meters	353,499		-			
38	348.00	Hydrants	459,176		-			
39	349.00	Other Transmission & Distribution	-		-			
40		**Subtotal Transmission and Distributio**	$ 3,316,804	$ -	$ (3,081)	$ -	$ -	$ -
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ -		-			
44	390.00	Structures and Improvements	52,175		-			
45	391.00	Office Funiture and Equipment	60,965		-			
46	391.10	Computer Equipment	(71,024)		-			
47	392.00	Transportation Equipment	215,881		-			
48	393.00	Stores Equipment	1,312		-			
49	394.00	Tools, Shop and Garage	3,446		-			
50	395.00	Laboratory Equipment	3,910		-			
51	396.00	Power Operated Equipment	7,773		-			
52	397.00	Communication Equipment	57,245		-			
53	398.00	Miscellaneous Equipment	22,574		-			
54		**Subtotal General**	$ 354,257	$ -	$ -	$ -	$ -	$ -
55								
56								
57			-		-			
58			(92,681)		-			
59		TOTAL WATER PLANT	$ 6,211,024	$ -	$ (4,349)	$ -	$ -	$ -
60								
61								
62								
63								
64								
65								
66								
67								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Schedule B-2, Page 8
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Deci	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American
Sun City West Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Blank Acquisition Adj Adjustment 7	Common Plant Adjustments Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization						$ -	$ -
3	302.00	Franchises						-	-
4	303.00	Miscellaneous Intangibles						-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights						$ -	$ -
9	311.00	Structures and Improvements						-	105,685
10	312.00	Collecting and Impounding Res.						-	-
11	313.00	Lakes, Rivers, Other Intakes						-	-
12	314.00	Wells and Springs						-	313,577
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ -	$ -	$ -	$ 419,262
14									
15		**Pumping**							
16	320.00	Land and Land Rights						$ -	$ -
17	321.00	Structures and Improvements						-	72,188
18	323.00	Other Power Production						-	-
19	325.00	Electric Pumping Equipment						(1,267)	2,137,616
20	326.00	Diesel Pumping Equipment						-	1,528
21	328.10	Gas Engine Pumping Equipment						-	551
22		**Subtotal Pumping**	$ -	$ -	$ -	$ -	$ -	$ (1,267)	$ 2,211,883
23									
24		**Water Treatment**							
25	330.00	Land and Land Rights						$ -	$ -
26	331.00	Structures and Improvements						-	6,456
27	332.00	Water Treatment Equipment						-	(6,223)
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ -	$ -	$ -	$ 232
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights						$ -	$ -
32	341.00	Structures and Improvements						-	-
33	342.00	Distribution, Reservoirs, & ST						-	156,455
34	343.00	Transmission and Distribution						(1,315)	2,615,815
35	344.00	Fire Mains						-	22
36	345.00	Services						(1,767)	(271,244)
37	346.00	Meters						-	353,499
38	348.00	Hydrants						-	459,176
39	349.00	Other Transmission & Distribution						-	-
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ -	$ -	$ (3,081)	$ 3,313,722
41									
42		**Allocated Common Plant**							
43	389.00	Land and Land Rights			-			$ -	$ -
44	390.00	Structures and Improvements			-			-	52,175
45	391.00	Office Funiture and Equipment			-			-	60,965
46	391.10	Computer Equipment			(6,163)			(6,163)	(77,187)
47	392.00	Transportation Equipment			-			-	215,881
48	393.00	Stores Equipment			-			-	1,312
49	394.00	Tools, Shop and Garage			-			-	3,446
50	395.00	Laboratory Equipment			-			-	3,910
51	396.00	Power Operated Equipment			(62)			(62)	7,711
52	397.00	Communication Equipment			-			-	57,245
53	398.00	Miscellaneous Equipment			(2,533)			(2,533)	20,042
54		**Subtotal General**	$ -	$ -	$ (8,757)	$ -	$ -	$ (8,757)	$ 345,500
55									
56									
57								-	-
58			92,681					92,681	(0)
59		TOTAL WATER PLANT	$ 92,681	$ -	$ (8,757)	$ -	$ -	$ 79,575	$ 6,290,599
60									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American - Sun City West Water
Common Plant Allocation
at December 31, 2002

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Original Cost	Rebuttal Allocated Original Cost	Rebuttal Allocated Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.16732	$ 817	$ 817	$ -	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.16732	560,392	560,392	-	52,031	52,031	-
5	391.00	Office Funiture and Equipment	0.16732	166,928	166,928	-	60,320	60,320	-
6	391.10	Computer Equipment	0.16732	238,993	137,273	(101,720)	(72,735)	(78,898)	(6,163)
7	392.00	Transportation Equipment	0.16732	300,746	300,746	-	173,707	173,707	-
8	393.00	Stores Equipment	0.16732	4,807	4,807	-	1,302	1,302	-
9	394.00	Tools, Shop and Garage	0.16732	68,778	68,778	-	3,051	3,051	-
10	395.00	Laboratory Equipment	0.16732	21,787	21,787	-	3,841	3,841	-
11	396.00	Power Operated Equipment	0.16732	20,133	20,021	(112)	7,164	7,102	(62)
12	397.00	Communication Equipment	0.16732	96,626	96,626	-	55,651	55,651	-
13	398.00	Miscellaneous Equipment	0.16732	46,365	43,832	(2,533)	21,493	18,961	(2,533)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 1,526,371	$ 1,422,006	$ (104,365)	$ 305,825	$ 297,068	$ (8,757)
20									
21									
22		SUPPORTING SCHEDULES							
23		Rebuttal B-2, Page 5							
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1								
2	389.00		0 $ 4,880	$ -	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements	3,349,189	-	3,349,189	310,963	-	310,963
4	391.00	Office Funiture and Equipment	997,650	-	997,650	360,503	-	360,503
5	391.10	Computer Equipment	1,428,345	(607,932)	820,413	(434,702)	(36,834)	(471,536)
6	392.00	Transportation Equipment	1,797,409	-	1,797,409	1,038,162	-	1,038,162
7	393.00	Stores Equipment	28,727	-	28,727	7,782	-	7,782
8	394.00	Tools, Shop and Garage	411,051	-	411,051	18,237	-	18,237
9	395.00	Laboratory Equipment	130,207	-	130,207	22,954	-	22,954
10	396.00	Power Operated Equipment	120,325	(669)	119,656	42,813	(368)	42,444
11	397.00	Communication Equipment	577,488	-	577,488	332,600	-	332,600
12	398.00	Miscellaneous Equipment	277,101	(15,137)	261,964	128,455	(15,137)	113,318
13								
14								
15		TOTALCOMMON PLANT	$ 9,122,373	$ (623,738)	$ 8,498,635	$ 1,827,766	$ (52,339)	$ 1,775,427
16								
17			SUPPORTING SCHEDULES					
18			Rebuttal Schedule B-2, Page 6a, 6b, 7a, 7b					
19								
20								

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880						
3	390.00	Structures and Improvements	3,349,189						
4	391.00	Office Funiture and Equipment	997,650						
5	391.10	Computer Equipment	1,428,345		(607,932)				
6	392.00	Transportation Equipment	1,797,409						
7	393.00	Stores Equipment	28,727						
8	394.00	Tools, Shop and Garage	411,051						
9	395.00	Laboratory Equipment	130,207						
10	396.00	Power Operated Equipment	120,325		(669)				
11	397.00	Communication Equipment	577,488						
12	398.00	Miscellaneous Equipment	277,101	(458)		(14,679)			
13		**Subtotal General**	$ 9,122,373	$ (458)	$ (608,601)	$ (14,679)	$ -	$ -	$ -
14									

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
2	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
3	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights							$ -	$ 4,880
3	390.00	Structures and Improvements							-	3,349,189
4	391.00	Office Funiture and Equipment							-	997,650
5	391.10	Computer Equipment							(607,932)	820,413
6	392.00	Transportation Equipment							-	1,797,409
7	393.00	Stores Equipment							-	28,727
8	394.00	Tools, Shop and Garage							-	411,051
9	395.00	Laboratory Equipment							-	130,207
10	396.00	Power Operated Equipment							(669)	119,656
11	397.00	Communication Equipment							-	577,488
12	398.00	Miscellaneous Equipment							(15,137)	261,964
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (623,738)	$ 8,498,635
14										

ADJ #	Reference
6	
7	
8	
9	
10	

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7a
Witness: Bour

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -						
3	390.00	Structures and Improvements	310,963						
4	391.00	Office Funiture and Equipment	360,503						
5	391.10	Computer Equipment	(434,702)		(36,834)				
6	392.00	Transportation Equipment	1,038,162						
7	393.00	Stores Equipment	7,782						
8	394.00	Tools, Shop and Garage	18,237						
9	395.00	Laboratory Equipment	22,954						
10	396.00	Power Operated Equipment	42,813		(368)				
11	397.00	Communication Equipment	332,600						
12	398.00	Miscellaneous Equipment	128,455	(458)		(14,679)			
13		**Subtotal General**	$ 1,827,766	$ (458)	$ (37,202)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights							$ -	$ -
3	390.00	Structures and Improvements							-	310,963
4	391.00	Office Funiture and Equipment							-	360,503
5	391.10	Computer Equipment							(36,834)	(471,536)
6	392.00	Transportation Equipment							-	1,038,162
7	393.00	Stores Equipment							-	7,782
8	394.00	Tools, Shop and Garage							-	18,237
9	395.00	Laboratory Equipment							-	22,954
10	396.00	Power Operated Equipment							(368)	42,444
11	397.00	Communication Equipment							-	332,600
12	398.00	Miscellaneous Equipment							(15,137)	113,318
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (52,339)	$ 1,775,427
14										

ADJ #	Reference
6	
7	
8	
9	
10	

Arizona-American Sun City West Water
Unidentified Plant

Exhibit
Rebuttal Schedule B-2
Page 8

Asset Id	Asset Desc.	Class	Acq. Date	Original Cost	A/D	RCN	Adjust O.C.	Adjust A/D	Adjust RCND	Adj.RCN A/D
3021932		W32500	19990531	11,175	(1,267)	12,335	(11,175)	(1,267)	(12,335)	(1,399)
1678074	UNIDENTIFIED	W34300	19871001	1,279	(279)	1,894	(1,279)	(1,279)	(1,894)	(1,894)
3118614		W34300	20010731	5,064	(36)	5,064	(5,064)	(36)	(5,064)	(36)
				6,343	(314)	6,958	(6,343)	(1,315)	(6,958)	(1,930)
1678805	CHAIR EACH	W34500	19900115	1,767	235	2,461	(1,767)	(1,767)	(2,461)	(2,461)
1678407	UNIDENTIFIED	W39800	19880401	458	(276)	670	(458)	(458)	(670)	(670)
				26,085	(1,936)	29,381	(19,742)	(4,807)	(22,423)	(6,460)

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
RCND Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-3
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 43,820,833	(1)	(1,825,753)	$ 41,995,079
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	8,953,449	(2)	48,744	9,002,193
8					
9	Net Utility Plant				
10	in Service	$ 34,867,384			$ 32,992,886
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	17,092,013	(3)	(833,279)	16,258,734
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	1,366,637	(4)	(66,627)	1,300,010
18	Purposes Only)				
19	Customer Meter Deposits	1,225			1,225
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Unamortized Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	-			-
28					
29	Total	$ 16,407,508			$ 15,432,917
30					
31					
32	(1) See B-3, Page 2				
33	(2) See B-3, Page 3				
34	(3) Adjust AIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
35	(4) Adjust CIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
36					
37					
38					
39					
40					

Arizona American - Sun City West Water
RCND Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 32,145	(12,058.55)	$ 20,086	$ -	$ -	$ -
3	302.00	Franchises	2,149	(561)	1,588	-	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	$ 34,293.63	$ (12,619.35)	$ 21,674.28	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 18,280.50	$ (6,630)	$ 11,651	$ -	$ -	$ -
9	311.00	Structures and Improvements	510,085	(15,085)	495,000	150,737	(6,934)	143,803
10	312.00	Collecting and Impounding Res.	-	-	-	-	-	-
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	1,778,831	(158,150)	1,620,681	406,508	(21,638)	384,870
13		**Subtotal Source of Supply**	$ 2,307,197	$ (179,865)	$ 2,127,332	$ 557,245	$ (28,573)	$ 528,673
14								
15		**Pumping**		$ -	$ -	$ -	$ -	
16	320.00	Land and Land Rights	$ 74,089	(29,132)	44,957	-	-	$ -
17	321.00	Structures and Improvements	391,321	(23,800)	367,521	120,722	(7,225)	113,497
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	6,993,868	931,620	7,925,488	2,959,520	395,773	3,355,293
20	326.00	Diesel Pumping Equipment	5,597	226	5,822	1,874	72	1,946
21	328.10	Gas Engine Pumping Equipment	2,124	21	2,145	656	6	662
22		**Subtotal Pumping**	$ 7,466,999	$ 878,934	$ 8,345,934	$ 3,082,772	$ 388,626	$ 3,471,398
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
26	331.00	Structures and Improvements	50,878	(1,755)	49,123	6,456	-	6,456
27	332.00	Water Treatment Equipment	187,608	(6,570)	181,037	(7,004)	145	(6,859)
28		**Subtotal Water Treatment**	$ 238,486	$ (8,325)	$ 230,160	$ (548)	$ 145	$ (403)
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
32	341.00	Structures and Improvements	-	-	-	-	-	-
33	342.00	Distribution, Reservoirs, & ST	1,207,423	(242,215)	965,208	255,634	(51,859)	203,775
34	343.00	Transmission and Distribution	18,317,917	(2,688,769)	15,629,148	4,024,084	(573,928)	3,450,156
35	344.00	Fire Mains	260	(39)	221	33	(5)	28
36	345.00	Services	8,229,925	(659,951)	7,569,975	(354,830)	32,908	(321,922)
37	346.00	Meters	2,262,959	(127,640)	2,135,319	469,355	(25,286)	444,069
38	348.00	Hydrants	2,512,461	436,970	2,949,431	677,229	113,931	791,161
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Transmission and Distribution**	$ 32,530,945	$ (3,281,644)	$ 29,249,301	$ 5,071,505	$ (504,239)	$ 4,567,266
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ 817	$ -	$ 817	$ -	$ -	$ -
44	390.00	Structures and Improvements	560,392	180,321	740,714	52,175	29,870	82,045
45	391.00	Office Funiture and Equipment	286,228	31,413	317,641	60,965	25,284	86,249
46	391.10	Computer Equipment	317,767	(88,023)	229,744	(71,024)	(14,114)	(85,138)
47	392.00	Transportation Equipment	318,346	67,267	385,613	215,881	16,847	232,727
48	393.00	Stores Equipment	4,807	1,526	6,333	1,312	591	1,902
49	394.00	Tools, Shop and Garage	68,778	18,720	87,498	3,446	(623)	2,823
50	395.00	Laboratory Equipment	21,787	3,172	24,959	3,910	718	4,628
51	396.00	Power Operated Equipment	20,133	5,969	26,102	7,773	2,288	10,061
52	397.00	Communication Equipment	118,526	21,222	139,749	57,245	13,384	70,629
53	398.00	Miscellaneous Equipment	46,365	15,145	61,510	22,574	6,758	29,333
54		**Subtotal General**	$ 1,763,945	$ 256,733	$ 2,020,678	$ 354,257	$ 81,002	$ 435,260
55								
56								
57								
58		AFUDC adjustment 3/95	(521,033)	521,033	0	(111,783)	111783	(0)
59		TOTAL WATER PLANT	$ 43,820,833	$ (1,825,753)	$ 41,995,079	$ 8,953,449	$ 48,744	$ 9,002,193
60								
61		SUPPORTING SCHEDULES:						
62		Rebuttal B-3, page 2a, 2b, 3a, 3b						
63								
64								

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Blank Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 32,145					-
3	302.00	Franchises	2,149					-
4	303.00	Miscellaneous Intangibles	-					-
5		**Subtotal Intangible**	$ 34,294	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						-
8	310.00	Land and Land Rights	$ 18,281					-
9	311.00	Structures and Improvements	510,085					8,366
10	312.00	Collecting and Impounding Res.	-					-
11	313.00	Lakes, Rivers, Other Intakes	-					-
12	314.00	Wells and Springs	1,778,831					(62,960)
13		**Subtotal Source of Supply**	$ 2,307,197	$ -	$ -	$ -	$ -	$ (54,594)
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 74,089					-
17	321.00	Structures and Improvements	391,321					-
18	323.00	Other Power Production	-					-
19	325.00	Electric Pumping Equipment	6,993,868		(12,335)			(2,335)
20	326.00	Diesel Pumping Equipment	5,597					-
21	328.10	Gas Engine Pumping Equipment	2,124					-
22		**Subtotal Pumping**	$ 7,466,999	$ -	$ (12,335)	$ -	$ -	$ (2,335)
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					-
26	331.00	Structures and Improvements	50,878					-
27	332.00	Water Treatment Equipment	187,608					463
28		**Subtotal Water Treatment**	$ 238,486	$ -	$ -	$ -	$ -	$ 463
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -					-
32	341.00	Structures and Improvements	-					-
33	342.00	Distribution, Reservoirs, & ST	1,207,423					(28,209)
34	343.00	Transmission and Distribution	18,317,917		(6,958)			(20,621)
35	344.00	Fire Mains	260					-
36	345.00	Services	8,229,925		(2,461)			-
37	346.00	Meters	2,262,959					-
38	348.00	Hydrants	2,512,461					3,530
39	349.00	Other Transmission & Distribution	-					-
40		**Subtotal Transmission and Distribution**	$ 32,530,945	$ -	$ (9,419)	$ -	$ -	$ (45,300)
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ 817					-
44	390.00	Structures and Improvements	560,392					-
45	391.00	Office Funiture and Equipment	286,228					(17,194)
46	391.10	Computer Equipment	317,767					-
47	392.00	Transportation Equipment	318,346					39,911
48	393.00	Stores Equipment	4,807					-
49	394.00	Tools, Shop and Garage	68,778					-
50	395.00	Laboratory Equipment	21,787					-
51	396.00	Power Operated Equipment	20,133					-
52	397.00	Communication Equipment	118,526					2,849
53	398.00	Miscellaneous Equipment	46,365					-
54		**Subtotal General**	$ 1,763,945	$ -	$ -	$ -	$ -	$ 25,566
55								
56								
57			-					
58			(521,033)					
59		TOTAL WATER PLANT	$ 43,820,833	$ -	$ (21,754)	$ -	$ -	$ (76,200)
60								

ADJ #		Reference
1	Plant Not Used and Useful	Blank
2	Unidentified Plant	Rebuttal Sched B-3, Page 8
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decisio	Blank
5	Post Test Year Plant	ACC Staff

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Blank Acquisition Adj Adjustment 7	Common Plant Adjustments Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Trended Reproduction Cost New
1		**Intangible**							
2	301.00	Organization				(12,059)		$ (12,059)	$ 20,086
3	302.00	Franchises				(561)		(561)	1,588
4	303.00	Miscellaneous Intangibles				-		-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ (12,619)	$ -	$ (12,619)	$ 21,674
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights				(6,630)		$ (6,630)	$ 11,651
9	311.00	Structures and Improvements				(23,451)		(15,085)	495,000
10	312.00	Collecting and Impounding Res.				-		-	-
11	313.00	Lakes, Rivers, Other Intakes				-		-	-
12	314.00	Wells and Springs				(95,190)		(158,150)	1,620,681
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ (125,271)	$ -	$ (179,865)	$ 2,127,332
14									
15		**Pumping**							
16	320.00	Land and Land Rights				(29,132)		$ (29,132)	$ 44,957
17	321.00	Structures and Improvements				(23,800)		(23,800)	367,521
18	323.00	Other Power Production				-		-	-
19	325.00	Electric Pumping Equipment				946,290		931,620	7,925,488
20	326.00	Diesel Pumping Equipment				226		226	5,822
21	328.10	Gas Engine Pumping Equipment				21		21	2,145
22		**Subtotal Pumping**	$ -	$ -	$ -	$ 893,604	$ -	$ 878,934	$ 8,345,934
23									
24		**Water Treatment**				-		$ -	
25	330.00	Land and Land Rights				-		-	$ -
26	331.00	Structures and Improvements				(1,755)		(1,755)	49,123
27	332.00	Water Treatment Equipment				(7,033)		(6,570)	181,037
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ (8,788)	$ -	$ (8,325)	$ 230,160
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights				-		$ -	$ -
32	341.00	Structures and Improvements				-		-	-
33	342.00	Distribution, Reservoirs, & ST				(214,006)		(242,215)	965,208
34	343.00	Transmission and Distribution				(2,661,190)		(2,688,769)	15,629,148
35	344.00	Fire Mains				(39)		(39)	221
36	345.00	Services				(657,489)		(659,951)	7,569,975
37	346.00	Meters				(127,640)		(127,640)	2,135,319
38	348.00	Hydrants				433,440		436,970	2,949,431
39	349.00	Other Transmission & Distribution				-		-	-
40		**Subtotal Transmission and Distribution**	$ -	$ -	$ -	$ (3,226,925)	$ -	$ (3,281,644)	$ 29,249,301
41									
42		**Allocated Common Plant**							
43	389.00	Land and Land Rights			-			$ -	$ 817
44	390.00	Structures and Improvements			180,321			180,321	740,714
45	391.00	Office Funiture and Equipment			48,606			31,413	317,641
46	391.10	Computer Equipment			(88,023)			(88,023)	229,744
47	392.00	Transportation Equipment			27,356			67,267	385,613
48	393.00	Stores Equipment			1,526			1,526	6,333
49	394.00	Tools, Shop and Garage			18,720			18,720	87,498
50	395.00	Laboratory Equipment			3,172			3,172	24,959
51	396.00	Power Operated Equipment			5,969			5,969	26,102
52	397.00	Communication Equipment			18,374			21,222	139,749
53	398.00	Miscellaneous Equipment			15,145			15,145	61,510
54		**Subtotal General**	$ -	$ -	$ 231,167	$ -	$ -	$ 256,733	$ 2,020,678
55									
56									
57								-	-
58			521,033					521,033	0
59		TOTAL WATER PLANT	$ 521,033	$ -	$ 231,167	$ (2,479,999)	$ -	$ (1,825,753)	$ 41,995,079
60									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Blank Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -		-			
3	302.00	Franchises	-		-			
4	303.00	Miscellaneous Intangibles	-		-			
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ -		-			
9	311.00	Structures and Improvements	150,737		-			
10	312.00	Collecting and Impounding Res.	-		-			
11	313.00	Lakes, Rivers, Other Intakes	-		-			
12	314.00	Wells and Springs	406,508		-			
13		**Subtotal Source of Supply**	$ 557,245	$ -	$ -	$ -	$ -	$ -
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ -		-			
17	321.00	Structures and Improvements	120,722		-			
18	323.00	Other Power Production	-		-			
19	325.00	Electric Pumping Equipment	2,959,520		(1,399)			
20	326.00	Diesel Pumping Equipment	1,874		-			
21	328.10	Gas Engine Pumping Equipment	656		-			
22		**Subtotal Pumping**	$ 3,082,772	$ -	$ (1,399)	$ -	$ -	$ -
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -		-			
26	331.00	Structures and Improvements	6,456		-			
27	332.00	Water Treatment Equipment	(7,004)		-			
28		**Subtotal Water Treatment**	$ (548)	$ -	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -		-			
32	341.00	Structures and Improvements	-		-			
33	342.00	Distribution, Reservoirs, & ST	255,634		-			
34	343.00	Transmission and Distribution	4,024,084		(1,930)			
35	344.00	Fire Mains	33					
36	345.00	Services	(354,830)		(2,461)			
37	346.00	Meters	469,355		-			
38	348.00	Hydrants	677,229		-			
39	349.00	Other Transmission & Distribution	-		-			
40		**Subtotal Transmission and Distribution**	$ 5,071,505	$ -	$ (4,391)	$ -	$ -	$ -
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ -		-			
44	390.00	Structures and Improvements	52,175		-			
45	391.00	Office Funiture and Equipment	60,965		-			
46	391.10	Computer Equipment	(71,024)		-			
47	392.00	Transportation Equipment	215,881		-			
48	393.00	Stores Equipment	1,312		-			
49	394.00	Tools, Shop and Garage	3,446		-			
50	395.00	Laboratory Equipment	3,910		-			
51	396.00	Power Operated Equipment	7,773		-			
52	397.00	Communication Equipment	57,245		-			
53	398.00	Miscellaneous Equipment	22,574		-			
54		**Subtotal General**	$ 354,257	$ -	$ -	$ -	$ -	$ -
55								
56								
57			-		-			
58			(111,783)		-			
59		TOTAL WATER PLANT	$ 8,953,449	$ -	$ (5,790)	$ -	$ -	$ -
60								
61								
62								
63								
64								
65								
66								
67								

ADJ #		Reference
1	Plant Not Used and Useful	Blank
2	Unidentified Plant	Rebuttal Sched B-3, Page 8
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decis	Blank
5	Post Test Year Plant	ACC Staff

Arizona American - Sun City Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Blank Acquisition Adj Adjustment 7	Common Plant Adjustments Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization				-		$ -	$ -
3	302.00	Franchises				-		-	-
4	303.00	Miscellaneous Intangibles				-		-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights				-		$ -	$ -
9	311.00	Structures and Improvements				(6,934)		(6,934)	143,803
10	312.00	Collecting and Impounding Res.				-		-	-
11	313.00	Lakes, Rivers, Other Intakes				-		-	-
12	314.00	Wells and Springs				(21,638)		(21,638)	384,870
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ (28,573)	$ -	$ (28,573)	$ 528,673
14									
15		**Pumping**							
16	320.00	Land and Land Rights				-		$ -	$ -
17	321.00	Structures and Improvements				(7,225)		(7,225)	113,497
18	323.00	Other Power Production				-		-	-
19	325.00	Electric Pumping Equipment				397,172		395,773	3,355,293
20	326.00	Diesel Pumping Equipment				72		72	1,946
21	328.10	Gas Engine Pumping Equipment				6		6	662
22		**Subtotal Pumping**	$ -	$ -	$ -	$ 390,025	$ -	$ 388,626	$ 3,471,398
23									
24		**Water Treatment**							
25	330.00	Land and Land Rights				-		$ -	$ -
26	331.00	Structures and Improvements				-		-	6,456
27	332.00	Water Treatment Equipment				145		145	(6,859)
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ 145	$ -	$ 145	$ (403)
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights				-		$ -	$ -
32	341.00	Structures and Improvements				-		-	-
33	342.00	Distribution, Reservoirs, & ST				(51,859)		(51,859)	203,775
34	343.00	Transmission and Distribution				(571,999)		(573,928)	3,450,156
35	344.00	Fire Mains				(5)		(5)	28
36	345.00	Services				35,369		32,908	(321,922)
37	346.00	Meters				(25,286)		(25,286)	444,069
38	348.00	Hydrants				113,931		113,931	791,161
39	349.00	Other Transmission & Distribution				-		-	-
40		**Subtotal Transmission and Distribution**	$ -	$ -	$ -	$ (499,848)	$ -	$ (504,239)	$ 4,567,266
41									
42		**Allocated Common Plant**							
43	389.00	Land and Land Rights			-			$ -	$ -
44	390.00	Structures and Improvements			29,870			29,870	82,045
45	391.00	Office Funiture and Equipment			25,284			25,284	86,249
46	391.10	Computer Equipment			(14,114)			(14,114)	(85,138)
47	392.00	Transportation Equipment			16,847			16,847	232,727
48	393.00	Stores Equipment			591			591	1,902
49	394.00	Tools, Shop and Garage			(623)			(623)	2,823
50	395.00	Laboratory Equipment			718			718	4,628
51	396.00	Power Operated Equipment			2,288			2,288	10,061
52	397.00	Communication Equipment			13,384			13,384	70,629
53	398.00	Miscellaneous Equipment			6,758			6,758	29,333
54		**Subtotal General**	$ -	$ -	$ 81,002	$ -	$ -	$ 81,002	$ 435,260
55									
56									
57								-	-
58			111,783					111,783	(0)
59		TOTAL WATER PLANT	$ 111,783	$ -	$ 81,002	$ (138,251)	$ -	$ 48,744	$ 9,002,193
60									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American - Sun City West Water
RCND Common Plant Allocation
at December 31, 2002

Exhibit
Schedule B-3
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Trended Amount	Rebuttal Allocated Trended Amount	Rebuttal Allocated Trended Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.16732	$ 817	$ 817	$ -	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.16732	560,392	740,714	180,321	52,031	81,901	29,870
5	391.00	Office Funiture and Equipment	0.16732	166,928	215,535	48,606	60,320	85,604	25,284
6	391.10	Computer Equipment	0.16732	238,993	150,970	(88,023)	(72,735)	(86,849)	(14,114)
7	392.00	Transportation Equipment	0.16732	300,746	328,102	27,356	173,707	190,554	16,847
8	393.00	Stores Equipment	0.16732	4,807	6,333	1,526	1,302	1,893	591
9	394.00	Tools, Shop and Garage	0.16732	68,778	87,498	18,720	3,051	2,429	(623)
10	395.00	Laboratory Equipment	0.16732	21,787	24,959	3,172	3,841	4,558	718
11	396.00	Power Operated Equipment	0.16732	20,133	26,102	5,969	7,164	9,452	2,288
12	397.00	Communication Equipment	0.16732	96,626	115,000	18,374	55,651	69,035	13,384
13	398.00	Miscellaneous Equipment	0.16732	46,365	61,510	15,145	21,493	28,252	6,758
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 1,526,371	$ 1,757,538	$ 231,167	$ 305,825	$ 386,827	$ 81,002
20									
21									
22									
23									
24	SUPPORTING SCHEDULES								
25	Rebuttal B-3, Page 5								
26									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 5
Witness: Bourassa

Line No.	Account No.	Description	Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Trended Direct Accumulated Depreciation	Adjustment	Rebuttal Trended Accumulated Depreciation
1								
2	389.00		0 $ 12,628	$ (7,748)	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements	4,545,571	(118,688)	4,426,882	506,059	(16,579)	489,480
4	391.00	Office Funiture and Equipment	1,286,955	1,191	1,288,146	502,142	9,471	511,613
5	391.10	Computer Equipment	1,588,744	(686,472)	902,272	(483,558)	(35,499)	(519,057)
6	392.00	Transportation Equipment	1,988,785	(27,882)	1,960,903	1,155,595	(16,750)	1,138,845
7	393.00	Stores Equipment	37,463	387	37,850	10,952	359	11,312
8	394.00	Tools, Shop and Garage	523,808	(874)	522,934	14,105	411	14,516
9	395.00	Laboratory Equipment	150,719	(1,554)	149,166	27,352	(109)	27,243
10	396.00	Power Operated Equipment	154,364	1,634	155,998	56,063	425	56,488
11	397.00	Communication Equipment	697,864	(10,566)	687,298	415,524	(2,934)	412,590
12	398.00	Miscellaneous Equipment	394,470	(26,855)	367,615	196,632	(27,786)	168,847
13								
14								
15		TOTALCOMMON PLANT	$ 11,381,370	$ (877,427)	$ 10,503,943	$ 2,400,866	$ (88,989)	$ 2,311,877
16								
17			SUPPORTING SCHEDULES					
18			Rebuttal Schedule B-3, Page 6a, 6b, 7a, 7b					
19								
20								

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6a

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880				(6,755)	-	-
3	390.00	Structures and Improvements	3,349,189				(78,054)	-	(2,575)
4	391.00	Office Furniture and Equipment	997,650				5,995	(2,202)	6,085
5	391.10	Computer Equipment	1,428,345		(670,782)		(12,717)	-	(2,402)
6	392.00	Transportation Equipment	1,797,409				(14,376)	(109)	(3,537)
7	393.00	Stores Equipment	28,727				732	-	59
8	394.00	Tools, Shop and Garage	411,051				1,875	(1,135)	(212)
9	395.00	Laboratory Equipment	130,207				(52)	-	116
10	396.00	Power Operated Equipment	120,325		(799)		3,730	-	(1,226)
11	397.00	Communication Equipment	577,488				(1,313)	-	1,715
12	398.00	Miscellaneous Equipment	277,101	(670)		(39,030)	12,635	(43)	454
13		**Subtotal General**	$ 9,122,373	$ (670)	$ (671,581)	$ (39,030)	$ (88,300)	$ (3,489)	$ (1,523)
14									
15									
16									
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21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights	-	(993)	-	-	-		$ (7,748)	$ (2,868)
3	390.00	Structures and Improvements	(17,341)	(10)	(3,192)	(2,612)	(14,906)		(118,688)	3,230,501
4	391.00	Office Furniture and Equipment	(4,567)	(247)	(2,019)	(906)	(947)		1,191	998,841
5	391.10	Computer Equipment	241	(255)	(556)	-	-		(686,472)	741,874
6	392.00	Transportation Equipment	(5,231)	(404)	(4,372)	148	-		(27,882)	1,769,527
7	393.00	Stores Equipment	(246)	(158)	-	-	-		387	29,114
8	394.00	Tools, Shop and Garage	(1,038)	(270)	(94)	-	-		(874)	410,177
9	395.00	Laboratory Equipment	124	-	-	(727)	(1,015)		(1,554)	128,654
10	396.00	Power Operated Equipment	11	-	-	(82)	-		1,634	121,959
11	397.00	Communication Equipment	(10,889)	(83)	3	-	-		(10,566)	566,923
12	398.00	Miscellaneous Equipment	413	(17)	(609)	11	-		(26,855)	250,246
13		**Subtotal General**	$ (38,523)	$ (2,436)	$ (10,839)	$ (4,168)	$ (16,868)	$ -	$ (877,427)	$ 8,244,946
14										
15										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

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Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 7a

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -				-	-	-
3	390.00	Structures and Improvements	310,963				(14,303)	-	(901)
4	391.00	Office Furniture and Equipment	360,503				3,247	526	6,108
5	391.10	Computer Equipment	(434,702)		(40,657)		5,273	-	118
6	392.00	Transportation Equipment	1,038,162				(9,526)	(109)	(2,171)
7	393.00	Stores Equipment	7,782				357	-	46
8	394.00	Tools, Shop and Garage	18,237				175	442	(60)
9	395.00	Laboratory Equipment	22,954				(18)	-	43
10	396.00	Power Operated Equipment	42,813		(440)		1,414	-	(546)
11	397.00	Communication Equipment	332,600				(1,154)	-	1,730
12	398.00	Miscellaneous Equipment	128,455	(670)		(39,030)	8,302	3,466	213
13		**Subtotal General**	$ 1,827,766	$ (670)	$ (41,096)	$ (39,030)	$ (6,233)	$ 4,325	$ 4,581
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
7b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights	-	-	-	-	-		$ -	$ -
3	390.00	Structures and Improvements	(492)	(2)	(259)	(93)	(529)		(16,579)	294,384
4	391.00	Office Funiture and Equipment	82	(44)	(274)	(80)	(94)		9,471	369,974
5	391.10	Computer Equipment	(9)	(178)	(48)	-	-		(35,499)	(470,201)
6	392.00	Transportation Equipment	(1,564)	(313)	(3,018)	(49)	-		(16,750)	1,021,413
7	393.00	Stores Equipment	5	(48)	-	-	-		359	8,141
8	394.00	Tools, Shop and Garage	(89)	(38)	(19)	-	-		411	18,648
9	395.00	Laboratory Equipment	28	-	-	(58)	(104)		(109)	22,845
10	396.00	Power Operated Equipment	1	-	-	(4)	-		425	43,238
11	397.00	Communication Equipment	(3,485)	(28)	3	-	-		(2,934)	329,666
12	398.00	Miscellaneous Equipment	150	(3)	(213)	0	-		(27,786)	100,670
13		**Subtotal General**	$ (5,372)	$ (654)	$ (3,829)	$ (284)	$ (727)	$ -	$ (88,989)	$ 1,738,777
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona-American Sun City West Water
B-3 Adjustments

Exhibit B-4
Page A1
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	B-2 Adjustments	Adjusted Original Cost	O.C. A/D	B-2 Adjustments
1		**Intangible**					
3	301.00	Organization	20,086	-	20,086	-	-
4	302.00	Franchises	1,588	-	1,588	-	-
5	303.00	Miscellaneous Intangibles	-	-	-	-	-
6		**Subtotal Intangible**	21,674	-	21,674	-	-
7							
8		**Source of Supply**					
9	310.00	Land and Land Rights	11,651	-	11,651	-	-
10	311.00	Structures and Improvements	342,925	-	342,925	101,401	-
11	312.00	Collecting and Impounding Res.	-	-	-	-	-
12	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-
13	314.00	Wells and Springs	1,307,051	-	1,307,051	297,115	-
14		**Subtotal Source of Supply**	1,661,627	-	1,661,627	398,515	-
15							
16		**Pumping**	-	-	-	-	-
17	320.00	Land and Land Rights	44,957	-	44,957	-	-
18	321.00	Structures and Improvements	231,439	-	231,439	70,256	-
19	323.00	Other Power Production	-	-	-	-	-
20	325.00	Electric Pumping Equipment	4,860,858	(11,175)	4,849,683	2,031,504	(1,267)
21	326.00	Diesel Pumping Equipment	4,505	-	4,505	1,428	-
22	328.10	Gas Engine Pumping Equipment	1,764	-	1,764	512	-
23		**Subtotal Pumping**	5,143,523	(11,175)	5,132,348	2,103,700	(1,267)
24							
25		**Water Treatment**					
26	330.00	Land and Land Rights	-	-	-	-	-
27	331.00	Structures and Improvements	38,357	-	38,357	-	-
28	332.00	Water Treatment Equipment	149,687	-	149,687	(3,080)	-
29		**Subtotal Water Treatment**	188,045	-	188,045	(3,080)	-
30							
31		**Transmission and Distribution**					
32	340.00	Land and Land Rights	-	-	-	-	-
33	341.00	Structures and Improvements	-	-	-	-	-
34	342.00	Distribution, Reservoirs, & ST	624,143	-	624,143	151,245	-
35	343.00	Transmission and Distribution	11,747,852	(6,343)	11,741,509	2,527,298	(1,315)
36	344.00	Fire Mains	169	-	169	21	-
37	345.00	Services	6,622,166	(1,767)	6,620,399	(351,558)	(1,767)
38	346.00	Meters	1,678,135	-	1,678,135	332,448	-
39	348.00	Hydrants	1,682,898	-	1,682,898	442,355	-
40	349.00	Other Transmission & Distribution	-	-	-	-	-
41		**Subtotal Trans & Dist**	22,355,363	(8,109)	22,347,253	3,101,809	(3,081)
42							
43		**General**					
44	389.00	Land and Land Rights	-	-	-	-	-
45	390.00	Structures and Improvements	17,268	-	17,268	6,041	-
46	391.00	Office Funiture and Equipment	28,137	-	28,137	28,245	-
47	391.10	Computer Equipment	74,599	-	74,599	(3,663)	-
48	392.00	Transportation Equipment	337,524	-	337,524	207,158	-
49	393.00	Stores Equipment	487	-	487	375	-
50	394.00	Tools, Shop and Garage	19,641	-	19,641	5,525	-
51	395.00	Laboratory Equipment	3,767	-	3,767	1,395	-
52	396.00	Power Operated Equipment	24,298	-	24,298	10,823	-
53	397.00	Communication Equipment	30,965	-	30,965	31,231	-
54	398.00	Miscellaneous Equipment	43,870	(458)	43,412	15,811	(458)
55		**Subtotal General**	580,556	(458)	580,098	302,942	(458)
		TOTAL WATER PLANT	29,950,788	(19,742)	29,931,046	5,903,886	(4,807)

Arizona-American Sun City West Water
B-3 Adjustments

Exhibit B-4
Page A2
Witness: Bourassa

Line No.	Account No.	Description	O.C. Adjusted A/D	RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted RCN	Adjustment (B-3, page 2b, Adj. #9) RCN Direct to RCN Rebuttal	Adjusted RCN Rebuttal
1		**Intangible**						
2	301.00	Organization	-	32,145	-	32,145	(12,059)	20,086
3	302.00	Franchises	-	2,149	-	2,149	(561)	1,588
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	-	34,294	-	34,294	(12,619)	21,674
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	-	18,281	-	18,281	(6,630)	11,651
9	311.00	Structures and Improvements	101,401	495,285	-	495,285	(23,451)	471,834
10	312.00	Collecting and Impounding Res.	-	-	-	-	-	-
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	297,115	1,715,871	-	1,715,871	(95,190)	1,620,681
13		**Subtotal Source of Supply**	398,515	2,229,437	-	2,229,437	(125,271)	2,104,166
14								
15		**Pumping**	-	-	-	-	-	-
16	320.00	Land and Land Rights	-	74,089	-	74,089	(29,132)	44,957
17	321.00	Structures and Improvements	70,256	391,321	-	391,321	(23,800)	367,521
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	2,030,236	6,824,428	(12,335)	6,812,094	946,290	7,758,383
20	326.00	Diesel Pumping Equipment	1,428	5,597	-	5,597	226	5,822
21	328.10	Gas Engine Pumping Equipment	512	2,124	-	2,124	21	2,145
22		**Subtotal Pumping**	2,102,433	7,297,559	(12,335)	7,285,225	893,604	8,178,829
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	-	-	-	-	-	-
26	331.00	Structures and Improvements	-	50,878	-	50,878	(1,755)	49,123
27	332.00	Water Treatment Equipment	(3,080)	187,608	-	187,608	(7,033)	180,574
28		**Subtotal Water Treatment**	(3,080)	238,486	-	238,486	(8,788)	229,697
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	-	-	-	-	-	-
32	341.00	Structures and Improvements	-	-	-	-	-	-
33	342.00	Distribution, Reservoirs, & ST	151,245	1,033,423	-	1,033,423	(214,006)	819,417
34	343.00	Transmission and Distribution	2,525,983	18,287,917	(6,958)	18,280,959	(2,661,190)	15,619,768
35	344.00	Fire Mains	21	260	-	260	(39)	221
36	345.00	Services	(353,325)	8,229,925	(2,461)	8,227,464	(657,489)	7,569,975
37	346.00	Meters	332,448	2,262,959	-	2,262,959	(127,640)	2,135,319
38	348.00	Hydrants	442,355	2,512,461	-	2,512,461	433,440	2,945,901
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Trans & Dist**	3,098,728	32,326,945	(9,419)	32,317,526	(3,226,925)	29,090,601
41								
42		**General**					**(Common Plant, B-2, Page 6)**	
43	389.00	Land and Land Rights	-	-	-	-	-	-
44	390.00	Structures and Improvements	6,041	31,886	-	31,886	(2,575)	29,311
45	391.00	Office Furniture and Equipment	28,245	46,777	-	46,777	6,085	52,862
46	391.10	Computer Equipment	(3,663)	88,055	-	88,055	(2,402)	85,653
47	392.00	Transportation Equipment	207,158	381,047	-	381,047	(3,537)	377,510
48	393.00	Stores Equipment	375	796	-	796	59	856
49	394.00	Tools, Shop and Garage	5,525	26,508	-	26,508	(212)	26,295
50	395.00	Laboratory Equipment	1,395	5,290	-	5,290	116	5,407
51	396.00	Power Operated Equipment	10,823	32,146	-	32,146	(1,226)	30,920
52	397.00	Communication Equipment	31,231	43,571	-	43,571	1,715	45,286
53	398.00	Miscellaneous Equipment	15,353	56,376	(670)	55,706	454	56,160
54		**Subtotal General**	302,484	712,451	(670)	711,781	(1,523)	710,259
55								
		TOTAL WATER PLANT	5,899,080	42,839,171	(22,423)	42,816,748	(2,481,522)	40,335,226

Arizona-American Sun City West Water
B-3 Adjustments

Exhibit B-4
Page A3
Witness: Bourassa

Line No.	Account No.	Description	A/D RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted A/D RCN Rebuttal	Ratio	A/D RCN Rebttual	(B-3, page 3b, Adj. #9) A/D Adjustment Adjusted RCN Direct to RCN Rebuttal
1		**Intangible**						
2	301.00	Organization	-	-	-	1.0000	-	-
3	302.00	Franchises	-	-	-	1.0000	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	-	-	-		-	-
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	-	-	-	1.0000	-	-
9	311.00	Structures and Improvements	146,453	-	146,453	1.3759	139,518	(6,934)
10	312.00	Collecting and Impounding Res.	-	-	-	-	-	-
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	390,046	-	390,046	1.2400	368,408	(21,638)
13		**Subtotal Source of Supply**	536,499	-	536,499		507,926	(28,573)
14								
15		**Pumping**	-	-	-	-	-	-
16	320.00	Land and Land Rights	-	-	-	1.0000	-	-
17	321.00	Structures and Improvements	118,790	-	118,790	1.5880	111,565	(7,225)
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	2,852,141	(1,399)	2,850,742	1.5998	3,247,914	397,172
20	326.00	Diesel Pumping Equipment	1,775	-	1,775	1.2925	1,846	72
21	328.10	Gas Engine Pumping Equipment	617	-	617	1.2164	623	6
22		**Subtotal Pumping**	2,973,322	(1,399)	2,971,924		3,361,948	390,025
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	-	-	-	-	-	-
26	331.00	Structures and Improvements	-	-	-	1.2807	-	-
27	332.00	Water Treatment Equipment	(3,860)	-	(3,860)	1.2063	(3,716)	145
28		**Subtotal Water Treatment**	(3,860)	-	(3,860)		(3,716)	145
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	-	-	-	-	-	-
32	341.00	Structures and Improvements	-	-	-	-	-	-
33	342.00	Distribution, Reservoirs, & ST	250,424	-	250,424	1.3129	198,565	(51,859)
34	343.00	Transmission and Distribution	3,934,252	(1,930)	3,932,323	1.3303	3,360,324	(571,999)
35	344.00	Fire Mains	32	-	32	1.3065	27	(5)
36	345.00	Services	(436,911)	(2,461)	(439,372)	1.1434	(404,003)	35,369
37	346.00	Meters	448,305	-	448,305	1.2724	423,018	(25,286)
38	348.00	Hydrants	660,409	-	660,409	1.7505	774,340	113,931
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Trans & Dist**	4,856,511	(4,391)	4,852,120		4,352,272	(499,848)
41								
42		**General**						(Common Plant, B-2, Page 7)
43	389.00	Land and Land Rights	-	-	-	-	-	-
44	390.00	Structures and Improvements	11,155	-	11,155	1.6974	10,254	(901)
45	391.00	Office Funiture and Equipment	46,956	-	46,956	1.8787	53,064	6,108
46	391.10	Computer Equipment	(4,324)	-	(4,324)	1.1482	(4,206)	118
47	392.00	Transportation Equipment	233,870	-	233,870	1.1185	231,699	(2,171)
48	393.00	Stores Equipment	613	-	613	1.7571	659	46
49	394.00	Tools, Shop and Garage	7,456	-	7,456	1.3388	7,397	(60)
50	395.00	Laboratory Equipment	1,960	-	1,960	1.4354	2,003	43
51	396.00	Power Operated Equipment	14,319	-	14,319	1.2725	13,773	(546)
52	397.00	Communication Equipment	43,946	-	43,946	1.4625	45,676	1,730
53	398.00	Miscellaneous Equipment	20,318	(670)	19,649	1.2936	19,862	213
54		**Subtotal General**	376,270	(670)	375,600		380,180	4,581
55								
		TOTAL WATER PLANT	8,738,741	(6,460)	8,732,282		8,598,611	(133,671)

10/09/2003

Trended RCN
Handy-Whitman

Exhibit
Schedule B-4
Page 1
Witness: Bourassa

Company Code: 4005 Business Area: 4506 Sun City West Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W30100	ORGANIZATION	1979	5,716	180.2	72.6	2.4821	14,187	5,716
W30100	ORGANIZATION	1981	2,194	180.2	91.9	1.9608	4,302	2,194
W30100	ORGANIZATION	1990	471	180.2	129.4	1.3926	656	471
W30100	ORGANIZATION	1991	11,705	180.2	136.2	1.3231	15,486	11,705
	W30100	Class Totals	20,086				34,632	20,086
W30200	FRANCH/CONSENTS	1979	224	180.2	72.6	2.4821	555	224
W30200	FRANCH/CONSENTS	1981	18	180.2	91.9	1.9608	35	18
W30200	FRANCH/CONSENTS	1994	1,346	180.2	148.7	1.2118	1,631	1,346
	W30200	Class Totals	1,588				2,222	1,588
W31000	LAND/LAND RIGHTS	1983	1,814	180.2	99.0	1.8202	3,301	1,814
W31000	LAND/LAND RIGHTS	1984	7,571	180.2	103.6	1.7394	13,168	7,571
W31000	LAND/LAND RIGHTS	1990	2,265	180.2	129.4	1.3926	3,155	2,265
	W31000	Class Totals	11,650				19,626	11,650
W31100	STRUCT AND IMPROV	1979	92	350.0	182.0	1.9231	176	176
W31100	STRUCT AND IMPROV	1980	11,124	350.0	207.0	1.6908	18,808	18,808
W31100	STRUCT AND IMPROV	1982	568	350.0	226.0	1.5487	879	879
W31100	STRUCT AND IMPROV	1983	5,765	350.0	233.0	1.5021	8,659	8,659
W31100	STRUCT AND IMPROV	1984	44,133	350.0	238.0	1.4706	64,901	64,901

Company Code: 4005 Business Area: 4506 Sun City West Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W31100	STRUCT AND IMPROV	1986	99,973	350.0	246.0	1.4228	142,241	142,241
W31100	STRUCT AND IMPROV	1987	33,013	350.0	249.0	1.4056	46,404	46,404
W31100	STRUCT AND IMPROV	1988	10,160	350.0	249.0	1.4056	14,281	14,281
W31100	STRUCT AND IMPROV	1988	3,253	350.0	255.0	1.3725	4,465	4,465
W31100	STRUCT AND IMPROV	1989	39,073	350.0	250.0	1.4000	54,703	54,703
W31100	STRUCT AND IMPROV	1990	640	350.0	259.0	1.3514	866	866
W31100	STRUCT AND IMPROV	1991	579	350.0	260.0	1.3462	779	779
W31100	STRUCT AND IMPROV	1991	29,004	350.0	262.0	1.3359	38,747	38,747
W31100	STRUCT AND IMPROV	1992	94	350.0	259.0	1.3514	128	128
W31100	STRUCT AND IMPROV	1994	2,651	350.0	286.0	1.2238	3,244	3,244
W31100	STRUCT AND IMPROV	1995	637	350.0	296.0	1.1824	754	754
W31100	STRUCT AND IMPROV	1995	3,901	350.0	298.0	1.1745	4,582	4,582
W31100	STRUCT AND IMPROV	1996	56,439	350.0	303.0	1.1551	65,193	65,193
W31100	STRUCT AND IMPROV	1997	963	350.0	314.0	1.1146	1,073	1,073
W31100	STRUCT AND IMPROV	1998	854	350.0	318.0	1.1006	940	940
	W31100	Class Totals	342,925				471,834	471,834
W31400	WELLS AND SPRINGS	1978	704	321.0	170.0	1.8882	1,329	1,329
W31400	WELLS AND SPRINGS	1982	20,317	321.0	216.0	1.4861	30,193	30,193
W31400	WELLS AND SPRINGS	1983	26,614	321.0	221.0	1.4525	38,656	38,656
W31400	WELLS AND SPRINGS	1984	11,044	321.0	228.0	1.4079	15,549	15,549
W31400	WELLS AND SPRINGS	1985	29,609	321.0	232.0	1.3836	40,967	40,967
W31400	WELLS AND SPRINGS	1986	136,272	321.0	238.0	1.3487	183,790	183,790
W31400	WELLS AND SPRINGS	1987	4,465	321.0	240.0	1.3375	5,972	5,972
W31400	WELLS AND SPRINGS	1988	10,707	321.0	248.0	1.2944	13,859	13,859

Company Code: 4005 Business Area: 4506 Sun City West Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W31400	WELLS AND SPRINGS	1989	175,664	321.0	246.0	1.3049	229,224	229,224
W31400	WELLS AND SPRINGS	1990	18,126	321.0	242.0	1.3264	24,042	24,042
W31400	WELLS AND SPRINGS	1991	1,935	321.0	245.0	1.3102	2,535	2,535
W31400	WELLS AND SPRINGS	1991	233,213	321.0	244.0	1.3156	306,816	306,816
W31400	WELLS AND SPRINGS	1996	618,182	321.0	281.0	1.1423	706,149	706,149
W31400	WELLS AND SPRINGS	1996	255	321.0	288.0	1.1146	284	284
W31400	WELLS AND SPRINGS	1998	11,107	321.0	298.0	1.0772	11,965	11,965
W31400	WELLS AND SPRINGS	1998	4,568	321.0	301.0	1.0664	4,871	4,871
W31400	WELLS AND SPRINGS	1999	4,264	321.0	306.0	1.0490	4,473	4,473
	W31400	Class Totals	1,307,050				1,620,681	1,620,681
W32000	LAND/LAND RIGHTS	1983	44,957	180.2	99.0	1.8202	81,830	44,957
	W32000	Class Totals	44,957				81,830	44,957
W32100	STRUCT AND IMPROV	1978	3,762	350.0	164.0	2.1341	8,028	8,028
W32100	STRUCT AND IMPROV	1979	76,012	350.0	182.0	1.9231	146,178	146,178
W32100	STRUCT AND IMPROV	1980	5,618	350.0	207.0	1.6908	9,498	9,498
W32100	STRUCT AND IMPROV	1981	260	350.0	220.0	1.5909	413	413
W32100	STRUCT AND IMPROV	1982	683	350.0	226.0	1.5487	1,057	1,057
W32100	STRUCT AND IMPROV	1983	41,918	350.0	233.0	1.5021	62,965	62,965
W32100	STRUCT AND IMPROV	1985	19,091	350.0	241.0	1.4523	27,725	27,725
W32100	STRUCT AND IMPROV	1986	19,107	350.0	246.0	1.4228	27,185	27,185
W32100	STRUCT AND IMPROV	1987	15,099	350.0	249.0	1.4056	21,224	21,224
W32100	STRUCT AND IMPROV	1988	1,466	350.0	255.0	1.3725	2,012	2,012

Company Code: 4005 Business Area: 4506 Sun City West Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W32100	STRUCT AND IMPROV	1993	43,414	350.0	274.0	1.2774	55,457	55,457
W32100	STRUCT AND IMPROV	1994	144	350.0	286.0	1.2238	177	177
W32100	STRUCT AND IMPROV	1996	4,330	350.0	303.0	1.1551	5,001	5,001
W32100	STRUCT AND IMPROV	1997	533	350.0	314.0	1.1146	594	594
	W32100	Class Totals	231,439				367,521	367,521
W32500	ELEC PUMP EQUIP	1978	65,299	531.0	192.0	2.7656	180,592	180,592
W32500	ELEC PUMP EQUIP	1979	361,330	531.0	205.0	2.5902	935,918	935,918
W32500	ELEC PUMP EQUIP	1980	5,818	531.0	222.0	2.3919	13,916	13,916
W32500	ELEC PUMP EQUIP	1981	3,120	531.0	245.0	2.1673	6,761	6,761
W32500	ELEC PUMP EQUIP	1982	37,157	531.0	260.0	2.0423	75,885	75,885
W32500	ELEC PUMP EQUIP	1984	131,865	531.0	277.0	1.9170	252,785	252,785
W32500	ELEC PUMP EQUIP	1985	29,540	531.0	282.0	1.8830	55,623	55,623
W32500	ELEC PUMP EQUIP	1986	1,413,759	531.0	284.0	1.8697	2,643,306	2,643,306
W32500	ELEC PUMP EQUIP	1987	147,040	531.0	299.0	1.7759	261,129	261,129
W32500	ELEC PUMP EQUIP	1988	56,820	531.0	303.0	1.7525	99,577	99,577
W32500	ELEC PUMP EQUIP	1989	17,100	531.0	309.0	1.7184	29,385	29,385
W32500	ELEC PUMP EQUIP	1989	176,826	531.0	336.0	1.5804	279,456	279,456
W32500	ELEC PUMP EQUIP	1990	13,276	531.0	340.0	1.5618	20,734	20,734
W32500	ELEC PUMP EQUIP	1991	933	531.0	357.0	1.4874	1,388	1,388
W32500	ELEC PUMP EQUIP	1991	195,278	531.0	350.0	1.5171	296,256	296,256
W32500	ELEC PUMP EQUIP	1992	5,453	531.0	363.0	1.4628	7,976	7,976
W32500	ELEC PUMP EQUIP	1992	38,654	531.0	370.0	1.4351	55,472	55,472
W32500	ELEC PUMP EQUIP	1993	331,446	531.0	369.0	1.4390	476,951	476,951
W32500	ELEC PUMP EQUIP	1993	18,908	531.0	378.0	1.4048	26,561	26,561

Company Code: 4005 Business Area: 4506 Sun City West Water

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W32500	ELEC PUMP EQUIP		1994	8,849	531.0	420.0	1.2643	11,188	11,188
W32500	ELEC PUMP EQUIP		1994	110,447	531.0	426.0	1.2465	137,672	137,672
W32500	ELEC PUMP EQUIP		1995	81,904	531.0	438.0	1.2123	99,292	99,292
W32500	ELEC PUMP EQUIP		1995	159,000	531.0	437.0	1.2151	193,200	193,200
W32500	ELEC PUMP EQUIP		1996	463,167	531.0	454.0	1.1696	541,720	541,720
W32500	ELEC PUMP EQUIP		1996	35,337	531.0	446.0	1.1906	42,072	42,072
W32500	ELEC PUMP EQUIP		1997	45,272	531.0	454.0	1.1696	52,950	52,950
W32500	ELEC PUMP EQUIP		1997	348,477	531.0	476.0	1.1155	388,726	388,726
W32500	ELEC PUMP EQUIP		1998	101,099	531.0	485.0	1.0948	110,683	110,683
W32500	ELEC PUMP EQUIP		1998	114,228	531.0	486.0	1.0926	124,805	124,805
W32500	ELEC PUMP EQUIP		1999	4,371	531.0	499.0	1.0641	4,651	4,651
W32500	ELEC PUMP EQUIP		1999	57,290	531.0	499.0	1.0641	60,963	60,963
W32500	ELEC PUMP EQUIP		2000	24,633	531.0	523.0	1.0153	25,010	25,010
W32500	ELEC PUMP EQUIP		2000	113,350	531.0	532.0	0.9981	113,135	113,135
W32500	ELEC PUMP EQUIP		2001	132,624	531.0	531.0	1.0000	132,624	132,624
		W32500	Class Totals	4,849,683				7,758,383	7,758,383
W32600	DIESEL PUMP EQUIP		1987	913	531.0	299.0	1.7759	1,621	1,621
W32600	DIESEL PUMP EQUIP		1996	3,591	531.0	454.0	1.1696	4,200	4,200
		W32600	Class Totals	4,504				5,822	5,822
W32800	OTHER PUMP EQUIP		1994	428	531.0	420.0	1.2643	542	542
W32800	OTHER PUMP EQUIP		1995	642	531.0	438.0	1.2123	778	778
W32800	OTHER PUMP EQUIP		1996	692	531.0	446.0	1.1906	824	824

	W32800	Class Totals	1,763				2,145	2,145
W33100	WATER TREAT EQUIP STRUCT &	1986	12,032	350.0	246.0	1.4228	17,119	17,119
W33100	WATER TREAT EQUIP STRUCT &	1989	3,016	350.0	250.0	1.4000	4,223	4,223
W33100	WATER TREAT EQUIP STRUCT &	1991	4,739	350.0	262.0	1.3359	6,331	6,331
W33100	WATER TREAT EQUIP STRUCT &	1996	18,569	350.0	303.0	1.1551	21,449	21,449
	W33100	Class Totals	38,357				49,123	49,123
W33200	WATER TREAT EQUIP	1984	10,301	403.0	279.0	1.4444	14,878	14,878
W33200	WATER TREAT EQUIP	1985	466	403.0	282.0	1.4291	665	665
W33200	WATER TREAT EQUIP	1986	474	403.0	287.0	1.4042	665	665
W33200	WATER TREAT EQUIP	1987	8,099	403.0	292.0	1.3801	11,178	11,178
W33200	WATER TREAT EQUIP	1989	3,244	403.0	309.0	1.3042	4,232	4,232
W33200	WATER TREAT EQUIP	1990	363	403.0	311.0	1.2958	470	470
W33200	WATER TREAT EQUIP	1990	4,595	403.0	314.0	1.2834	5,897	5,897
W33200	WATER TREAT EQUIP	1991	361	403.0	312.0	1.2917	466	466
W33200	WATER TREAT EQUIP	1991	28,891	403.0	313.0	1.2875	37,198	37,198
W33200	WATER TREAT EQUIP	1993	697	403.0	327.0	1.2324	860	860
W33200	WATER TREAT EQUIP	1995	6,650	403.0	335.0	1.2030	8,000	8,000
W33200	WATER TREAT EQUIP	1996	19,373	403.0	342.0	1.1784	22,830	22,830
W33200	WATER TREAT EQUIP	1996	14,848	403.0	347.0	1.1614	17,245	17,245
W33200	WATER TREAT EQUIP	1997	17,020	403.0	360.0	1.1194	19,052	19,052
W33200	WATER TREAT EQUIP	1998	19,749	403.0	367.0	1.0981	21,687	21,687
W33200	WATER TREAT EQUIP	1998	4,413	403.0	370.0	1.0892	4,807	4,807
W33200	WATER TREAT EQUIP	1999	2,012	403.0	379.0	1.0633	2,139	2,139
W33200	WATER TREAT EQUIP	2000	5,236	403.0	390.0	1.0333	5,410	5,410
W33200	WATER TREAT EQUIP	2001	2,886	403.0	403.0	1.0000	2,886	2,886

	W33200	Class Totals	149,687				180,574	180,574
W34200	DIST RESRV & STNDPIP	1978	15,626	275.0	173.0	1.5896	24,839	24,839
W34200	DIST RESRV & STNDPIP	1979	256,014	275.0	178.0	1.5449	395,516	395,516
W34200	DIST RESRV & STNDPIP	1983	4,239	275.0	182.0	1.5110	6,405	6,405
W34200	DIST RESRV & STNDPIP	1984	2,857	275.0	184.0	1.4946	4,270	4,270
W34200	DIST RESRV & STNDPIP	1986	30,139	275.0	184.0	1.4946	45,045	45,045
W34200	DIST RESRV & STNDPIP	1987	394	275.0	196.0	1.4031	553	553
W34200	DIST RESRV & STNDPIP	1990	11,328	275.0	221.0	1.2443	14,096	14,096
W34200	DIST RESRV & STNDPIP	1991	417	275.0	232.0	1.1853	495	495
W34200	DIST RESRV & STNDPIP	1993	303,127	275.0	254.0	1.0827	328,195	328,195
	W34200	Class Totals	624,143				819,417	819,417
W34300	TRANS/DISTR	1978	1,194,601	324.0	179.0	1.8101	2,162,348	2,162,348
W34300	TRANS/DISTR	1979	693,235	324.0	193.0	1.6788	1,163,802	1,163,802
W34300	TRANS/DISTR	1980	725,513	324.0	209.0	1.5502	1,124,690	1,124,690
W34300	TRANS/DISTR	1981	601,024	324.0	224.0	1.4464	869,321	869,321
W34300	TRANS/DISTR	1982	623,029	324.0	239.0	1.3556	844,578	844,578
W34300	TRANS/DISTR	1983	24,932	324.0	246.0	1.3171	32,837	32,837
W34300	TRANS/DISTR	1984	846,859	324.0	244.0	1.3279	1,124,544	1,124,544
W34300	TRANS/DISTR	1985	533,842	324.0	248.0	1.3065	697,464	697,464
W34300	TRANS/DISTR	1986	622,998	324.0	245.0	1.3224	823,853	823,853
W34300	TRANS/DISTR	1987	783,999	324.0	252.0	1.2857	1,007,988	1,007,988
W34300	TRANS/DISTR	1988	87,914	324.0	264.0	1.2273	107,897	107,897
W34300	TRANS/DISTR	1989	365,351	324.0	269.0	1.2045	440,065	440,065
W34300	TRANS/DISTR	1989	325,678	324.0	273.0	1.1868	386,515	386,515
W34300	TRANS/DISTR	1990	252,058	324.0	273.0	1.1868	299,142	299,142

Company Code: 4005 Business Area: 4506 Sun City West Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34300	TRANS/DISTR	1990	1,093	324.0	275.0	1.1782	1,288	1,288
W34300	TRANS/DISTR	1991	1,593	324.0	277.0	1.1697	1,864	1,864
W34300	TRANS/DISTR	1991	202,758	324.0	279.0	1.1613	235,463	235,463
W34300	TRANS/DISTR	1992	405,130	324.0	277.0	1.1697	473,881	473,881
W34300	TRANS/DISTR	1993	564,239	324.0	281.0	1.1530	650,568	650,568
W34300	TRANS/DISTR	1993	34,959	324.0	285.0	1.1368	39,741	39,741
W34300	TRANS/DISTR	1994	57,391	324.0	291.0	1.1134	63,899	63,899
W34300	TRANS/DISTR	1994	1,006,171	324.0	289.0	1.1211	1,128,018	1,128,018
W34300	TRANS/DISTR	1995	5,662	324.0	291.0	1.1134	6,304	6,304
W34300	TRANS/DISTR	1995	500,393	324.0	286.0	1.1329	566,895	566,895
W34300	TRANS/DISTR	1996	365,741	324.0	289.0	1.1211	410,033	410,033
W34300	TRANS/DISTR	1996	31,305	324.0	292.0	1.1096	34,736	34,736
W34300	TRANS/DISTR	1997	82,085	324.0	297.0	1.0909	89,546	89,546
W34300	TRANS/DISTR	1997	194,693	324.0	299.0	1.0836	210,970	210,970
W34300	TRANS/DISTR	1999	140,672	324.0	313.0	1.0351	145,610	145,610
W34300	TRANS/DISTR	1999	16,761	324.0	306.0	1.0588	17,746	17,746
W34300	TRANS/DISTR	2000	58,653	324.0	308.0	1.0519	61,697	61,697
W34300	TRANS/DISTR	2000	121,283	324.0	316.0	1.0253	124,351	124,351
W34300	TRANS/DISTR	2001	177,423	324.0	320.0	1.0125	179,641	179,641
W34300	TRANS/DISTR	2001	92,459	324.0	324.0	1.0000	92,459	92,459
	W34300	Class Totals	11,741,508				15,619,768	15,619,768
W34400	FIRE MAINS	1985	169	324.0	248.0	1.3065	220	220

	W34400	Class Totals	169				220	220
W34500	SERVICES	1979	2,973	288.0	168.0	1.7143	5,096	5,096
W34500	SERVICES	1980	275,559	288.0	181.0	1.5912	438,469	438,469
W34500	SERVICES	1981	23,653	288.0	192.0	1.5000	35,479	35,479
W34500	SERVICES	1982	6,042	288.0	198.0	1.4545	8,788	8,788
W34500	SERVICES	1983	18,537	288.0	207.0	1.3913	25,790	25,790
W34500	SERVICES	1984	31,098	288.0	211.0	1.3649	42,445	42,445
W34500	SERVICES	1985	7,806	288.0	211.0	1.3649	10,654	10,654
W34500	SERVICES	1987	7,937	288.0	227.0	1.2687	10,070	10,070
W34500	SERVICES	1988	685	288.0	230.0	1.2522	858	858
W34500	SERVICES	1989	38,441	288.0	221.0	1.3032	50,097	50,097
W34500	SERVICES	1989	11,565	288.0	224.0	1.2857	14,869	14,869
W34500	SERVICES	1990	259,025	288.0	226.0	1.2743	330,076	330,076
W34500	SERVICES	1990	25,990	288.0	228.0	1.2632	32,831	32,831
W34500	SERVICES	1991	160,108	288.0	235.0	1.2255	196,212	196,212
W34500	SERVICES	1991	113,637	288.0	236.0	1.2203	138,671	138,671
W34500	SERVICES	1992	304,019	288.0	241.0	1.1950	363,302	363,302
W34500	SERVICES	1992	147,198	288.0	251.0	1.1474	168,895	168,895
W34500	SERVICES	1993	440,410	288.0	251.0	1.1474	505,327	505,327
W34500	SERVICES	1993	53,949	288.0	249.0	1.1566	62,398	62,398
W34500	SERVICES	1994	456,611	288.0	265.0	1.0868	496,244	496,244
W34500	SERVICES	1994	247,043	288.0	250.0	1.1520	284,594	284,594
W34500	SERVICES	1995	213,484	288.0	253.0	1.1383	243,009	243,009
W34500	SERVICES	1995	1,118,951	288.0	255.0	1.1294	1,263,743	1,263,743
W34500	SERVICES	1996	212,923	288.0	263.0	1.0951	233,172	233,172
W34500	SERVICES	1996	842,762	288.0	262.0	1.0992	926,364	926,364
W34500	SERVICES	1997	176	288.0	263.0	1.0951	192	192

Company Code: 4005 Business Area: 4506 Sun City West Water

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34500	SERVICES		1997	753,676	288.0	266.0	1.0827	816,005	816,005
W34500	SERVICES		1999	181,701	288.0	271.0	1.0627	193,094	193,094
W34500	SERVICES		1999	118,475	288.0	274.0	1.0511	124,529	124,529
W34500	SERVICES		2000	73,193	288.0	278.0	1.0360	75,828	75,828
W34500	SERVICES		2001	9,312	288.0	285.0	1.0105	9,410	9,410
W34500	SERVICES		2001	463,449	288.0	288.0	1.0000	463,449	463,449
		W34500	Class Totals	6,620,398				7,569,974	7,569,974
W34600	METERS		1978	22,982	350.0	162.0	2.1605	49,652	49,652
W34600	METERS		1979	40,695	350.0	174.0	2.0115	81,858	81,858
W34600	METERS		1980	15,927	350.0	190.0	1.8421	29,339	29,339
W34600	METERS		1981	3,387	350.0	202.0	1.7327	5,868	5,868
W34600	METERS		1982	35,340	350.0	219.0	1.5982	56,480	56,480
W34600	METERS		1983	21,279	350.0	235.0	1.4894	31,692	31,692
W34600	METERS		1984	94,907	350.0	241.0	1.4523	137,833	137,833
W34600	METERS		1985	49,223	350.0	239.0	1.4644	72,082	72,082
W34600	METERS		1986	101,393	350.0	248.0	1.4113	143,095	143,095
W34600	METERS		1987	87,078	350.0	253.0	1.3834	120,464	120,464
W34600	METERS		1988	19,381	350.0	256.0	1.3672	26,498	26,498
W34600	METERS		1989	24,741	350.0	257.0	1.3619	33,695	33,695
W34600	METERS		1989	56,362	350.0	261.0	1.3410	75,581	75,581
W34600	METERS		1990	37,184	350.0	262.0	1.3359	49,674	49,674
W34600	METERS		1990	11,340	350.0	264.0	1.3258	15,035	15,035
W34600	METERS		1991	24,743	350.0	276.0	1.2681	31,377	31,377
W34600	METERS		1992	44,871	350.0	283.0	1.2367	55,492	55,492

Company Code: 4005 Business Area: 4506 Sun City West Water

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34600	METERS		1993	99,180	350.0	292.0	1.1986	118,877	118,877
W34600	METERS		1993	99,360	350.0	295.0	1.1864	117,880	117,880
W34600	METERS		1994	288,419	350.0	297.0	1.1785	339,902	339,902
W34600	METERS		1995	220	350.0	303.0	1.1551	254	254
W34600	METERS		1995	38,841	350.0	303.0	1.1551	44,865	44,865
W34600	METERS		1996	164,590	350.0	316.0	1.1076	182,300	182,300
W34600	METERS		1996	28,824	350.0	318.0	1.1006	31,723	31,723
W34600	METERS		1997	141,447	350.0	322.0	1.0870	153,753	153,753
W34600	METERS		1998	544	350.0	322.0	1.0870	591	591
W34600	METERS		1999	19,877	350.0	329.0	1.0638	21,145	21,145
W34600	METERS		1999	30,407	350.0	332.0	1.0542	32,055	32,055
W34600	METERS		2000	19,466	350.0	339.0	1.0324	20,097	20,097
W34600	METERS		2001	4,932	350.0	348.0	1.0057	4,960	4,960
W34600	METERS		2001	51,186	350.0	350.0	1.0000	51,186	51,186
		W34600	Class Totals	1,678,135				2,135,318	2,135,318
W34800	HYDRANTS		1978	91,659	527.0	192.0	2.7448	251,585	251,585
W34800	HYDRANTS		1979	62,385	527.0	206.0	2.5583	159,599	159,599
W34800	HYDRANTS		1980	70,362	527.0	220.0	2.3955	168,552	168,552
W34800	HYDRANTS		1981	78,832	527.0	235.0	2.2426	176,788	176,788
W34800	HYDRANTS		1982	22,377	527.0	260.0	2.0269	45,355	45,355
W34800	HYDRANTS		1983	2,898	527.0	278.0	1.8957	5,493	5,493
W34800	HYDRANTS		1984	177,966	527.0	280.0	1.8821	334,949	334,949
W34800	HYDRANTS		1985	164,063	527.0	287.0	1.8362	301,252	301,252
W34800	HYDRANTS		1986	101,038	527.0	297.0	1.7744	179,281	179,281

Company Code: 4005 Business Area: 4506 Sun City West Water

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34800	HYDRANTS		1987	144,822	527.0	309.0	1.7055	246,994	246,994
W34800	HYDRANTS		1988	16,643	527.0	316.0	1.6677	27,756	27,756
W34800	HYDRANTS		1988	7,126	527.0	318.0	1.6572	11,809	11,809
W34800	HYDRANTS		1989	68,287	527.0	328.0	1.6067	109,717	109,717
W34800	HYDRANTS		1989	34,600	527.0	338.0	1.5592	53,948	53,948
W34800	HYDRANTS		1990	42,875	527.0	349.0	1.5100	64,742	64,742
W34800	HYDRANTS		1990	153	527.0	354.0	1.4887	229	229
W34800	HYDRANTS		1991	35,740	527.0	359.0	1.4680	52,467	52,467
W34800	HYDRANTS		1992	50,113	527.0	361.0	1.4598	73,155	73,155
W34800	HYDRANTS		1993	72,358	527.0	366.0	1.4399	104,188	104,188
W34800	HYDRANTS		1993	13,560	527.0	368.0	1.4321	19,419	19,419
W34800	HYDRANTS		1994	143,395	527.0	365.0	1.4438	207,034	207,034
W34800	HYDRANTS		1995	72,149	527.0	373.0	1.4129	101,940	101,940
W34800	HYDRANTS		1996	68,693	527.0	377.0	1.3979	96,026	96,026
W34800	HYDRANTS		1996	4,607	527.0	379.0	1.3905	6,406	6,406
W34800	HYDRANTS		1997	629	527.0	442.0	1.1923	750	750
W34800	HYDRANTS		1997	29,955	527.0	453.0	1.1634	34,850	34,850
W34800	HYDRANTS		1998	442	527.0	467.0	1.1285	498	498
W34800	HYDRANTS		1998	4,400	527.0	466.0	1.1309	4,976	4,976
W34800	HYDRANTS		1999	21,024	527.0	482.0	1.0934	22,988	22,988
W34800	HYDRANTS		1999	6,663	527.0	484.0	1.0888	7,255	7,255
W34800	HYDRANTS		2000	34,793	527.0	498.0	1.0582	36,818	36,818
W34800	HYDRANTS		2001	33,690	527.0	515.0	1.0233	34,475	34,475
W34800	HYDRANTS		2001	4,590	527.0	527.0	1.0000	4,590	4,590
		W34800	Class Totals	1,682,897				2,945,900	2,945,900

Company Code: 4005 Business Area: 4506 Sun City West Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39000	MISC STRUCTURES	1979	4,748	350.0	182.0	1.9231	9,130	9,130
W39000	MISC STRUCTURES	1980	5,561	350.0	207.0	1.6908	9,402	9,402
W39000	MISC STRUCTURES	1982	6,959	350.0	226.0	1.5487	10,777	10,777
	W39000	Class Totals	17,268				29,310	29,310
W39100	OFFICE FURN/EQUIP	1978	6,920	180.2	65.0	2.7723	19,184	19,184
W39100	OFFICE FURN/EQUIP	1979	1,797	180.2	72.6	2.4821	4,460	4,460
W39100	OFFICE FURN/EQUIP	1980	2,164	180.2	83.3	2.1633	4,681	4,681
W39100	OFFICE FURN/EQUIP	1981	143	180.2	91.9	1.9608	280	280
W39100	OFFICE FURN/EQUIP	1982	143	180.2	97.4	1.8501	264	264
W39100	OFFICE FURN/EQUIP	1984	1,044	180.2	103.6	1.7394	1,815	1,815
W39100	OFFICE FURN/EQUIP	1985	1,545	180.2	108.0	1.6685	2,577	2,577
W39100	OFFICE FURN/EQUIP	1986	675	180.2	109.8	1.6412	1,107	1,107
W39100	OFFICE FURN/EQUIP	1987	2,304	180.2	113.2	1.5919	3,667	3,667
W39100	OFFICE FURN/EQUIP	1988	2,109	180.2	117.7	1.5310	3,230	3,230
W39100	OFFICE FURN/EQUIP	1989	3,252	180.2	123.3	1.4615	4,753	4,753
W39100	OFFICE FURN/EQUIP	1990	481	180.2	129.4	1.3926	669	669
W39100	OFFICE FURN/EQUIP	1991	202	180.2	136.2	1.3231	268	268
W39100	OFFICE FURN/EQUIP	1998	5,356	180.2	163.6	1.1015	5,900	5,900
	W39100	Class Totals	28,137				52,861	52,861
W39110	COMPUTER EQUIPMENT	1989	1,539	180.2	123.3	1.4615	2,250	2,250
W39110	COMPUTER EQUIPMENT	1993	780	180.2	145.5	1.2385	966	966

Company Code: 4005 Business Area: 4506 Sun City West Water

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39110	COMPUTER EQUIPMENT	1994	18,872	180.2	148.7	1.2118	22,869	22,869
W39110	COMPUTER EQUIPMENT	1995	19,630	180.2	152.2	1.1840	23,241	23,241
W39110	COMPUTER EQUIPMENT	1995	8,136	180.2	152.2	1.1840	9,633	9,633
W39110	COMPUTER EQUIPMENT	2000	25,641	180.2	173.1	1.0410	26,692	26,692
	W39110	Class Totals	74,598				85,652	85,652
W39200	TRANSPORT EQUIP	1989	25,410	180.2	123.3	1.4615	37,136	37,136
W39200	TRANSPORT EQUIP	1990	136	180.2	129.4	1.3926	189	189
W39200	TRANSPORT EQUIP	1993	62,638	180.2	145.5	1.2385	77,577	77,577
W39200	TRANSPORT EQUIP	1996	25,897	180.2	156.6	1.1507	29,800	29,800
W39200	TRANSPORT EQUIP	1997	36,372	180.2	160.6	1.1220	40,809	40,809
W39200	TRANSPORT EQUIP	1999	39,532	180.2	167.8	1.0739	42,453	42,453
W39200	TRANSPORT EQUIP	2000	48,887	180.2	173.1	1.0410	50,891	50,891
W39200	TRANSPORT EQUIP	2001	98,651	180.2	180.2	1.0000	98,651	98,651
	W39200	Class Totals	337,524				377,509	377,509
W39300	STORES EQUIPMENT	1982	345	180.2	97.4	1.8501	638	638
W39300	STORES EQUIPMENT	1988	141	180.2	117.7	1.5310	217	217
	W39300	Class Totals	486				855	855
W39400	TOOLS AND WORK EQUIP	1982	190	180.2	97.4	1.8501	351	351
W39400	TOOLS AND WORK EQUIP	1983	20	180.2	99.0	1.8202	36	36

Company Code: 4005 Business Area: 4506 Sun City West Water

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39400	TOOLS AND WORK EQUIP		1984	167	180.2	103.6	1.7394	290	290
W39400	TOOLS AND WORK EQUIP		1985	1,164	180.2	108.0	1.6685	1,942	1,942
W39400	TOOLS AND WORK EQUIP		1986	756	180.2	109.8	1.6412	1,240	1,240
W39400	TOOLS AND WORK EQUIP		1987	1,149	180.2	113.2	1.5919	1,829	1,829
W39400	TOOLS AND WORK EQUIP		1988	64	180.2	117.7	1.5310	98	98
W39400	TOOLS AND WORK EQUIP		1988	1,687	180.2	117.7	1.5310	2,583	2,583
W39400	TOOLS AND WORK EQUIP		1989	277	180.2	123.3	1.4615	404	404
W39400	TOOLS AND WORK EQUIP		1991	1,545	180.2	136.2	1.3231	2,045	2,045
W39400	TOOLS AND WORK EQUIP		1992	1,725	180.2	141.0	1.2780	2,205	2,205
W39400	TOOLS AND WORK EQUIP		1993	2,765	180.2	145.5	1.2385	3,425	3,425
W39400	TOOLS AND WORK EQUIP		1994	7,833	180.2	148.7	1.2118	9,492	9,492
W39400	TOOLS AND WORK EQUIP		1994	151	180.2	148.7	1.2118	182	182
W39400	TOOLS AND WORK EQUIP		1996	144	180.2	156.6	1.1507	166	166
		W39400	Class Totals	19,641				26,295	26,295
W39500	LAB EQUIP		1986	223	180.2	109.8	1.6412	365	365
W39500	LAB EQUIP		1987	248	180.2	113.2	1.5919	394	394
W39500	LAB EQUIP		1988	1,670	180.2	117.7	1.5310	2,558	2,558
W39500	LAB EQUIP		1991	750	180.2	136.2	1.3231	993	993
W39500	LAB EQUIP		1992	337	180.2	141.0	1.2780	431	431
W39500	LAB EQUIP		1993	489	180.2	145.5	1.2385	605	605
W39500	LAB EQUIP		1994	47	180.2	148.7	1.2118	57	57
		W39500	Class Totals	3,766				5,406	5,406

Company Code: 4005 Business Area: 4506 Sun City West Water

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39600	PWR OPER EQUIP		1990	2,457	180.2	129.4	1.3926	3,421	3,421
W39600	PWR OPER EQUIP		1992	16,264	180.2	141.0	1.2780	20,785	20,785
W39600	PWR OPER EQUIP		1994	3,948	180.2	148.7	1.2118	4,785	4,785
W39600	PWR OPER EQUIP		1995	1,628	180.2	152.2	1.1840	1,927	1,927
		W39600	Class Totals	24,298				30,920	30,920
W39700	COMM EQUIP		1988	3,809	180.2	117.7	1.5310	5,832	5,832
W39700	COMM EQUIP		1989	26,222	180.2	123.3	1.4615	38,323	38,323
W39700	COMM EQUIP		1994	933	180.2	148.7	1.2118	1,130	1,130
		W39700	Class Totals	30,964				45,286	45,286
W39800	MISC EQUIP		1980	3,877	180.2	83.3	2.1633	8,387	8,387
W39800	MISC EQUIP		1981	280	180.2	91.9	1.9608	549	549
W39800	MISC EQUIP		1985	1,578	180.2	108.0	1.6685	2,632	2,632
W39800	MISC EQUIP		1991	13,486	180.2	136.2	1.3231	17,843	17,843
W39800	MISC EQUIP		1993	648	180.2	145.5	1.2385	803	803
W39800	MISC EQUIP		1994	103	180.2	148.7	1.2118	125	125
W39800	MISC EQUIP		1998	23,438	180.2	163.6	1.1015	25,817	25,817
		W39800	Class Totals	43,412				56,159	56,159
Company Code:	4005	Business Area:	4506	29,931,045				40,395,255	40,335,225

Arizona American
Summary of Rebuttal Adjustments
Test Year December 31, 2001

Exhibit
Rebuttal Schedule C-2
Witness: Bourassa
Page1

	Water/ Sewer Label	Description	Sun City West Water
Revenues			
Revenues		None	
Other Revenues		None	
			$ -
Operating Expenses			
Salaries and Wages	1	Adjust to Actual 2002 Wages	$ (14,825)
	6	Adjust to Actual 2002 Additional (Corporate)	(51,400)
Purchased Water	11	Adjust to annualized 2001 qty ordered	
Purchased Wastewater Treatment		None	
Purchased Power		None	
Fuel for Power Production			
Chemicals		None	
Materials ans Supplies		None	
Repairs and Maintenance		None	
Office Supplies and Expense	7	Adjust to Actual 2002 Additional (Corporate)	(37,083)
Outside Services			
Service Company Charges	10	Adjust to Actual 2002 Service Company Charges	(17,242)
Water Testing		None	
Rents		None	
Transportation Expenses			
Insurance - General Liability	8	Adjust to Actual 2002 Additional (Corporate)	(1,899)
Insurance - Health and Life		None	
Rate Case Expense		None	
Miscellaneous Expense	9	Adjust to Actual 2002 Additional (Corporate)	298
Depreciation Expense	3	Depreciation Expense	6,434
Taxes Other Than Income	2	Adjust to 2002 PR Tax based on Actual Wages	(1,639)
Property Taxes	4	Property Taxes	(8,206)
Income Tax			74,225
Tolleson Wastewater User Fees		None	
Total Operating Expenses			$ (51,336)
Operating Income			$ 51,336

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line No.		Amount
1	Projected Salaries & Wages and Related Expenses	
2		
3	Actual 2002 Wages and Salaries	
4	Salaries & Wages	$ 332,908
5		
6	Direct Filing Proposed Wages and Salaries	
7	Salaries & Wages	347,733
8		
9	Increase (Decrease)	$ (14,825)
10		
11	Adjustment to Revenues and/or Expenses	$ (14,825)
12		
13		
14		
15		

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line No.		Amount
1	Projected Salaries & Wages and Related Expenses	
2		
3	PR Taxes Based on Actual 2002 Wages and Salaries	
4	Taxes Other Than Income	26,433
5		
6	Direct Filing Proposed PR Taxes	
7	Taxes Other Than Income	28,072
8		
9	Increase (Decrease)	$ (1,639)
10		
11	Adjustment to Revenues and/or Expenses	$ (1,639)
12		
13		
14		
15		

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Depreciation Expense

Line No.	Account No.	Description	Rebuttak Original Cost	Rate	Depreciation Expense
1		**Intangible**			
2	301.00	Organization	$ 20,086	0.00%	$ -
3	302.00	Franchises	1,588	0.00%	-
4	303.00	Miscellaneous Intangibles	-	0.00%	-
5		**Subtotal Intangible**	$ 21,674		$ -
6					
7		**Source of Supply**			
8	310.00	Land and Land Rights	$ 11,651	0.00%	$ -
9	311.00	Structures and Improvements	366,092	2.50%	9,152
10	312.00	Collecting and Impounding Res.	-	0.00%	-
11	313.00	Lakes, Rivers, Other Intakes	-	0.00%	-
12	314.00	Wells and Springs	1,307,051	2.52%	32,938
13		**Subtotal Source of Supply**	$ 1,684,793		$ 42,090
14					
15		**Pumping**			
16	320.00	Land and Land Rights	$ 44,957	0.00%	$ -
17	321.00	Structures and Improvements	231,439	1.67%	3,865
18	323.00	Other Power Production	-	0.00%	-
19	325.00	Electric Pumping Equipment	5,016,788	4.42%	221,742
20	326.00	Diesel Pumping Equipment	4,505	4.42%	199
21	328.10	Gas Engine Pumping Equipment	1,764	4.42%	78
22		**Subtotal Pumping**	$ 5,299,453		$ 225,884
23					
24		**Water Treatment**			
25	330.00	Land and Land Rights	$ -	0.00%	$ -
26	331.00	Structures and Improvements	38,357	1.67%	641
27	332.00	Water Treatment Equipment	150,150	4.00%	6,006
28		**Subtotal Water Treatment**	$ 188,508		$ 6,647
29					
30		**Transmission and Distribution**			
31	340.00	Land and Land Rights	$ -	0.00%	$ -
32	341.00	Structures and Improvements	-	0.00%	-
33	342.00	Distribution, Reservoirs, & ST	769,934	1.67%	12,858
34	343.00	Transmission and Distribution	11,750,888	1.53%	179,789
35	344.00	Fire Mains	169	0.00%	-
36	345.00	Services	6,620,399	2.48%	164,186
37	346.00	Meters	1,678,135	2.51%	42,121
38	348.00	Hydrants	1,686,428	2.00%	33,729
39	349.00	Other Transmission & Distribution	-	0.00%	-
40		**Subtotal Transmission and Distribution**	$ 22,505,953		$ 432,682
41					
42		**General**			
43	389.00	Land and Land Rights	$ 817	0.00%	$ -
44	390.00	Structures and Improvements	560,392	1.68%	9,419
45	391.00	Office Funiture and Equipment	269,035	4.55%	12,228
46	391.10	Computer Equipment	216,047	4.55%	9,820
47	392.00	Transportation Equipment	358,256	25.00%	89,564
48	393.00	Stores Equipment	4,807	3.92%	188
49	394.00	Tools, Shop and Garage	68,778	4.14%	2,844
50	395.00	Laboratory Equipment	21,787	3.71%	808
51	396.00	Power Operated Equipment	20,021	5.14%	1,030
52	397.00	Communication Equipment	121,375	10.28%	12,474
53	398.00	Miscellaneous Equipment	43,832	4.98%	2,183
54		**Subtotal General**	$ 1,685,146		$ 140,559
55					
56				2.70%	-
57					
58					
59		TOTALS	$ 31,385,527	2.701%	$ 847,861
60					
61					
62		Amortization of Deferred Regulatory Assets	$ 217,667	2.7014%	5,880
63					
64		Less: Amotization of Contributions	$ 971,578	10.0000%	(97,158)
65		Rebuttal Depreciation Expense			$ 756,584
66					
67		Direct Filing Depreciation Expense			750,150
68					
69		Increase (decrease) in Depreciation Expense			6,434
70					
71		Adjustment to Revenues and/or Expenses			$ 6,434
72					

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line No.		
1	Adjust Property Taxes to Reflect Proposed Revenues:	
2		
3	Rebuttal Adjusted Revenues in year ended 12/31/01	$ 3,380,774
4	Rebuttal Adjusted Revenues in year ended 12/31/01	3,380,774
5	Proposed Revenues	4,596,616
6	Average of three year's of revenue	$ 3,786,055
7	Average of three year's of revenue, times 2	7,572,110
8	Add:	
9	Construction Work in Progess at 10%	
10	Deduct:	
11	Book Value of Transportation Equipment	358,256
12	Book Value of Transportation Equipment (proforma)	-
13	Total Book Value of Transportation Equipment	$ 358,256
14		
15	Full Cash Value	$ 7,213,853
16	Assessment Ratio	25%
17	Assessed Value	1,803,463
18	Property Tax Rate	8.485354%
19		
20	Property Tax	153,030
21	Tax on Parcels	24,529
22		
23	Total Rebuttal Property Tax at Proposed Rates	$ 177,560
24	Direct Filing Proposed Property Taxes	185,765
25	Increase (Decrease) in Property Taxes	$ (8,206)
26		
27		
28	Adjustment to Revenues and/or Expenses	$ (8,206)
29		
30		

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line No.		
1	Interest Synchronization with Rate Base	
2		
3	Rebuttal Fair Value Rate Base	$15,432,917
4	Weigted Cost of Debt from Schedule D-1	2.92%
5	Rebuttal Synchronized Interest Expense	450,024
6	Direct Filing Interest Expense	516,761
7	Increase in Interest Expense	$ (66,737)
8		
9	Adjustment to Revenues and/or Expense	$ (66,737)
10		
11		

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
Page 7
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Salaries & Wages Expense (Corpor	$	56,757
5			
6	Direct Filing Proposed Additonal Salaries & Wages Expens		108,156
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(51,400)
10			
11	Adjustment to Revenue and/or Expense	$	(51,400)
12			
13			
14			
15			

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Office Expense (Corporate)	$	125,780
5			
6	Direct Filing Proposed Additonal Office Expense (Corporat		162,863
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(37,083)
10			
11	Adjustment to Revenue and/or Expense	$	(37,083)
12			
13			
14			
15			

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
Page 9
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Insurance Expense (Corporate)	$	26,451
5			
6	Direct Filing Proposed Additonal Insurance Expense (Corp		28,350
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(1,899)
10			
11	*Adjustment to Revenue and/or Expense*	$	(1,899)
12			
13			
14			
15			

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 9

Exhibit
Rebuttal Schedule C-2
Page 10
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Misc. Expense (Corporate)	$	1,397
5			
6	Direct Filing Proposed Additonal Misc. Expense (Corporate		1,099
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	298
10			
11	Adjustment to Revenue and/or Expense	$	298
12			
13			
14			
15			

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 10

Exhibit
Schedule C-2
Page 11
Witness: Bourassa

Line No.				
1	Service Company Charges			
2				
3	Total 2002 Charges	$	4,981,460	
4	Allocation Factor (4 factor Formula)		0.1001	
5	Total Charges			$ 498,644
6				
7				
8	Direct Filing Proposed Charges	$	5,153,711	
9	Allocation Factor (4 factor Formula)		0.1001	
10	Total Charges			515,886
11				
12				
13	Adjustment to Revenues and/or Expenses			$ (17,242)
14				
15				
16				
17				

Arizona American - Sun City West Water
Test Year Ended December 31, 2001
Summary of Cost of Capital

Exhibit
Rebuttal Schedule D-1
Page 1
Witness: Stephenson

Line No.	Item of Capital	End of Test Year Percent of Total	(e) Cost Rate	Weighted Cost	End of Projected Year Percent of Total	(e) Cost Rate	Weighted Cost
1	Long-Term Debt	60.00%	4.86%	2.92%	60.00%	4.86%	2.92%
2							
3	Stockholder's Equity (c)	40.00%	11.50%	4.60%	40.00%	11.50%	4.60%
4							
5	Totals	100.00%		7.52%	100.00%		7.52%
6							
7							
8	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							

SUN CITY WEST
WASTEWATER

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

Line No.					
1	Fair Value Rate Base			$	12,221,084
2					
3	Adjusted Operating Income				(70,271)
4					
5	Current Rate of Return				-0.57%
6					
7	Required Operating Income			$	918,537
8					
9	Required Rate of Return on Fair Value Rate Base				7.52%
10					
11	Operating Income Deficiency			$	988,808
12					
13	Gross Revenue Conversion Factor				1.6286
14					
15	Increase in Gross Revenue				
16	Requirement			$	1,610,407
17					
18	Customer	Present	Proposed	Dollar	Percent
19	Classification	Rates	Rates	Increase	Increase
20	Residential Units (WSR)	$ 2,789,886	$ 4,061,139	$ 1,271,253	45.57%
21	Commercial Units (SSC)	$76,035	$110,711	$ 34,675	45.60%
22	Commercial Large User (WS6)	12,683	18,499	5,816	45.86%
23	Muti-family Residential Units (AC WSRE)	553,264	805,368	252,103	45.57%
24		-	-	-	0.00%
25		-	-	-	0.00%
26	Commercial additional toilets (WS1)	70,575	102,800	32,225	45.66%
27	Commercial per dishwasher (WS2)	11,241	16,368	5,127	45.61%
28	Commercial per wash machine (WS3)	3,247	4,728	1,481	45.62%
29	Commercial per wash rack (WS4)	2,497	3,636	1,139	45.60%
30	Miscellaneous Revenues	1,002	1,002	-	0.00%
31	Subtotal of Revenues	3,520,431	5,124,250	1,603,820	45.56%
32					
33					
34	Revenue Annualization				
35	Residential Units (WSR)	$ 3,134	$ 4,563	$ 1,428	45.57%
36	Commercial Units (SSC)	7,089	10,321	3,233	45.60%
37	Commercial Large User (WS6)	681	992	311	45.62%
38	Muti-family Residential Units (AC WSRE)	-	-	-	0.00%
39	Commercial additional toilets (WS1)	(424)	(618)	(194)	45.66%
40	Commercial per dishwasher (WS2)	-	-	-	0.00%
41	Commercial per wash machine (WS3)	566	824	258	45.62%
42	Commercial per wash rack (WS4)	-	-	-	0.00%
43	Total Revenue Annualization	$ 11,046	$ 16,083	$ 5,036	45.59%
44		0	0	0	0.00%
45	Total Revenues	$ 3,531,477	$ 5,140,333	$ 1,608,856	45.56%
46					
47	SUPPORTING SCHEDULES:				
48	Rebuttal B-1				
49	Rebuttal C-1				
50	Rebuttal D-1				
51	Rebuttal H-1				
52					
53					

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Summary of Fair Value Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	RCND Rate base	Fair Value Rate base (RCND Only)
1				
2	Gross Utility Plant in Service	$ 39,022,368	$ 54,170,595	$ 54,170,595
3	Less: Accumulated Depreciation	14,145,184	19,791,126	19,791,126
4				
5	Net Utility Plant in Service	$ 24,877,183	$ 34,379,469	$ 34,379,469
6				
7	Less:			
8	Advances in Aid of			
9	Construction	14,502,979	20,132,941	20,132,941
10	Contributions in Aid of			
11	Construction - Net of amortization	1,458,672	2,024,919	2,024,919
12	Customer Meter Deposits	525	525	525
13	Deferred Income Taxes & Credits	-	-	-
14	Investment tax Credits	-	-	-
15	Plus:			
16	Deferred Finance			
17	Charges	-	-	-
18	Deferred Tax Assets	-	-	-
19	Allowance for Working Capital	-	-	-
20	Citizens Acquisition Adjustment	10,321,436	-	-
21				
22	Total Rate Base	$ 19,236,443	$ 12,221,084	$ 12,221,084
23				
24				
25				
26	SUPPORTING SCHEDULES:		RECAP SCHEDULES:	
27	Rebuttal B-2		Rebuttal A-1	
28	Rebuttal B-3			
29				
30				
31				

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 39,101,812	(1)	(79,444)	$ 39,022,368
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	14,290,245	(2)	(145,061)	14,145,184
8					
9	Net Utility Plant				
10	in Service	$ 24,811,567			$ 24,877,183
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	14,502,979			14,502,979
15	Contributions in Aid of				
16					
17	Construction - Net (Ratemaking	1,458,672			1,458,672
18	Purposes Only)				
19	Customer Meter Deposits	525			525
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Deferred Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	10,401,376	(3)	(79,940)	10,321,436
28					
29	Total	$ 19,250,767			$ 19,236,443
30					
31					
32	(1) See Rebuttal B-2, Page 2				
33	(2) See Rebuttal B-2, Page 3				
34	(3) See Rebuttal B-2, Page 4				
35					
36					
37					
38					
39					
40					
41					
42					
43					

Arizona American - Sun City West Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 4,078	$ -	$ 4,078	$ -	$ -	$ -
3	302.00	Franchises	1,372	-	1,372	-	-	-
4	303.00	Miscellaneous Intangibles	5,184	-	5,184	-	-	-
5		**Subtotal Intangible**	$ 10,634	$ -	$ 10,634	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 542,319	$ -	$ 542,319	$ -	$ -	$ -
9	311.00	Structures and Improvements	2,739,560	(21,563)	2,717,997	1,636,500	-	1,636,500
10	312.00	Preliminary Treatment	1,075,243	(6,300)	1,068,943	582,392	-	582,392
11	313.00	Primary Treatment Equipment	1,084,172	-	1,084,172	535,800	-	535,800
12	314.00	Secondary Treatment Equipment	5,714,476	-	5,714,476	2,453,354	-	2,453,354
13	315.00	Tertiary Equipment	6,087,981	-	6,087,981	1,686,172	-	1,686,172
14	316.00	Disinfection Equipment	245,070	(212,082)	32,988	162,002	(210,266)	(48,264)
15	317.00	Effluent Lift Station E	1,004,341	-	1,004,341	459,319	-	459,319
16	318.00	Outfall Line	94,680	18,461	113,141	70,529	-	70,529
17	319.00	Sludge, Treatment & Distribution	-	-	-	-	-	-
18	321.00	Influent Lift Station	97,846	(6,300)	91,546	18,316	-	18,316
19	322.00	General Treatment Equipment	902,060	(2,987)	899,073	147,306	(68)	147,238
20		**Subtotal Treatment & Discharge**	$ 19,587,747	$ (230,770)	$ 19,356,976	$ 7,751,691	$ (210,334)	$ 7,541,356
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ 20,747	$ -	$ 20,747	$ -	$ -	$ -
24	341.00	Structures and Improvements	-	-	-	-	-	-
25	342.00	Collection System Lift	1,356,167	(380)	1,355,787	1,248,263	(327)	1,247,936
26	343.00	Collection Mains	12,982,219	(4,544)	12,977,675	3,966,296	-	3,966,296
27	344.00	Force Mains	752,939	-	752,939	220,480	-	220,480
28	345.00	Discharge Services	2,645,161	-	2,645,161	781,065	-	781,065
29	348.00	Manholes	0	-	0	-	-	-
30		**Subtotal Collection and Influent**	$ 17,757,233	$ (4,924)	$ 17,752,309	$ 6,216,103	$ (327)	$ 6,215,777
31								
32		**Allocated Common Plant**						
33	389.00	Land and Land Rights	$ 780	$ -	$ 780	$ -	$ -	$ -
34	390.00	Structures and Improvements	834,864	-	834,864	98,403	-	98,403
35	391.00	Office Funiture and Equipment	307,582	(9,826)	297,756	60,492	-	60,492
36	391.10	Computer Equipment	273,086	(97,203)	175,883	(68,300)	(5,889)	(74,189)
37	392.00	Transportation Equipment	287,389	-	287,389	195,324	-	195,324
38	393.00	Stores Equipment	4,593	-	4,593	1,464	-	1,464
39	394.00	Tools, Shop and Garage	71,223	(3,880)	67,343	5,230	-	5,230
40	395.00	Laboratory Equipment	26,319	(5,500)	20,819	4,716	-	4,716
41	396.00	Power Operated Equipment	19,239	(107)	19,132	7,170	(59)	7,111
42	397.00	Communication Equipment	119,535	32,468	152,003	69,591	-	69,591
43	398.00	Miscellaneous Equipment	44,306	(2,420)	41,886	22,329	(2,420)	19,909
44		**Subtotal General**	$ 1,988,915	$ (86,467)	$ 1,902,448	$ 396,420	$ (8,369)	$ 388,052
45								
46								
47		ADEUC adjustment 3/95	(242,717)	242,717	-	(73,969)	73,969	(0)
48		TOTAL WASTEWATER PLANT	$ 39,101,812	$ (79,444)	$ 39,022,367	$ 14,290,245	$ (145,061)	$ 14,145,184
49								
50								
51		SUPPORTING SCHEDULES:						
52		Rebuttal B-2, page 2a, 2b, 3a, 3b						
53								

Arizona American
Sun City West Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 4,078					$ -
3	302.00	Franchises	1,372					-
4	303.00	Miscellaneous Intangibles	5,184					-
5		**Subtotal Intangible**	$ 10,634	$ -	$ -	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 542,319					$ -
9	311.00	Structures and Improvements	2,739,560					(21,563)
10	312.00	Preliminary Treatment	1,075,243					(6,300)
11	313.00	Primary Treatment Equipment	1,084,172					-
12	314.00	Secondary Treatment Equipment	5,714,476					-
13	315.00	Tertiary Equipment	6,087,981					-
14	316.00	Disinfection Equipment	245,070	(212,082)				-
15	317.00	Effluent Lift Station E	1,004,341					-
16	318.00	Outfall Line	94,680					18,461
17	319.00	Sludge, Treatment & Distribution	-					-
18	321.00	Influent Lift Station	97,846					(6,300)
19	322.00	General Treatment Equipment	902,060		(2,987)			-
20		**Subtotal Treatment & Discharge**	$ 19,587,747	$ (212,082)	$ (2,987)	$ -	$ -	$ (15,702)
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ 20,747					$ -
24	341.00	Structures and Improvements	-					-
25	342.00	Collection System Lift	1,356,167		(380)			-
26	343.00	Collection Mains	12,982,219					(4,544)
27	344.00	Force Mains	752,939					-
28	345.00	Discharge Services	2,645,161					-
29	348.00	Manholes	0					-
30		**Subtotal Collection and Influent**	$ 17,757,233	$ -	$ (380)	$ -	$ -	$ (4,544)
31								
32		**Allocated Common Plant**						
33	389.00	Land and Land Rights	$ 780					$ -
34	390.00	Structures and Improvements	834,864					-
35	391.00	Office Funiture and Equipment	307,582					(9,826)
36	391.10	Computer Equipment	273,086					-
37	392.00	Transportation Equipment	287,389					-
38	393.00	Stores Equipment	4,593					-
39	394.00	Tools, Shop and Garage	71,223					(3,880)
40	395.00	Laboratory Equipment	26,319					(5,500)
41	396.00	Power Operated Equipment	19,239					-
42	397.00	Communication Equipment	119,535					32,468
43	398.00	Miscellaneous Equipment	44,306					-
44		**Subtotal General**	$ 1,988,915	$ -	$ -	$ -	$ -	$ 13,262
45								
46			-					
47		ADFUC adjustment 3/95	(242,717)					
48		TOTAL WASTEWATER PLANT	$ 39,101,812	$ (212,082)	$ (3,367)	$ -	$ -	$ (6,983)
49								

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decis	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American
Sun City West Wastewater
Plant Summary
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Exhibit
Rebuttal Schedule B-2
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Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Original Cost
1		**Intangible**							
2	301.00	Organization						$ -	$ 4,078
3	302.00	Franchises						-	1,372
4	303.00	Miscellaneous Intangibles						-	5,184
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,634
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights						$ -	$ 542,319
9	311.00	Structures and Improvements						(21,563)	2,717,997
10	312.00	Preliminary Treatment						(6,300)	1,068,943
11	313.00	Primary Treatment Equipment						-	1,084,172
12	314.00	Secondary Treatment Equipment						-	5,714,476
13	315.00	Tertiary Equipment						-	6,087,981
14	316.00	Disinfection Equipment						(212,082)	32,988
15	317.00	Effluent Lift Station E						-	1,004,341
16	318.00	Outfall Line						18,461	113,141
17	319.00	Sludge, Treatment & Distribution						-	-
18	321.00	Influent Lift Station						(6,300)	91,546
19	322.00	General Treatment Equipment						(2,987)	899,073
20		**Subtotal Treatment & Discharge**	$ -	$ -	$ -	$ -	$ -	$ (230,770)	$ 19,356,976
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights							$ 20,747
24	341.00	Structures and Improvements						-	-
25	342.00	Collection System Lift						(380)	1,355,787
26	343.00	Collection Mains						(4,544)	12,977,675
27	344.00	Force Mains						-	752,939
28	345.00	Discharge Services						-	2,645,161
29	348.00	Manholes						-	0
30		**Subtotal Collection and Influent**	$ -	$ -	$ -	$ -	$ -	$ (4,924)	$ 17,752,309
31									
32		**Allocated Common Plant**							
33	389.00	Land and Land Rights			$ -			$ -	$ 780
34	390.00	Structures and Improvements			-			-	834,864
35	391.00	Office Funiture and Equipment			-			(9,826)	297,756
36	391.10	Computer Equipment			(97,203)			(97,203)	175,883
37	392.00	Transportation Equipment			-			-	287,389
38	393.00	Stores Equipment			-			-	4,593
39	394.00	Tools, Shop and Garage			-			(3,880)	67,343
40	395.00	Laboratory Equipment			-			(5,500)	20,819
41	396.00	Power Operated Equipment			(107)			(107)	19,132
42	397.00	Communication Equipment			-			32,468	152,003
43	398.00	Miscellaneous Equipment			(2,420)			(2,420)	41,886
44		**Subtotal General**	$ -	$ -	$ (99,730)	$ -	$ -	$ (86,467)	$ 1,902,448
45									
46									-
47		ADFUC adjustment 3/95	242,717					242,717	-
48		TOTAL WASTEWATER PLANT	$ 242,717	$ -	$ (99,730)	$ -	$ -	$ (79,444)	$ 39,022,367
49									
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52									
53									
54									
55									
56									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American
Sun City West Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					
3	302.00	Franchises	-					
4	303.00	Miscellaneous Intangibles	-					
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ -					
9	311.00	Structures and Improvements	1,636,500					
10	312.00	Preliminary Treatment	582,392					
11	313.00	Primary Treatment Equipment	535,800					
12	314.00	Secondary Treatment Equipment	2,453,354					
13	315,00	Tertiary Equipment	1,686,172					
14	316.00	Disinfection Equipment	162,002	(210,266)				
15	317.00	Effluent Lift Station E	459,319					
16	318.00	Outfall Line	70,529					
17	319.00	Sludge, Treatment & Distribution	-					
18	321.00	Influent Lift Station	18,316					
19	322.00	General Treatment Equipment	147,306		(68)			
20		**Subtotal Treatment & Discharge**	$ 7,751,691	$ (210,266)	$ (68)	$ -	$ -	$ -
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -					
24	341.00	Structures and Improvements	-					
25	342.00	Collection System Lift	1,248,263		(327)			
26	343.00	Collection Mains	3,966,296					
27	344.00	Force Mains	220,480					
28	345.00	Discharge Services	781,065					
29	348.00	Manholes	-					
30		**Subtotal Collection and Influent**	$ 6,216,103	$ -	$ (327)	$ -	$ -	$ -
31								
32		**Allocated Common Plant**						
33	389.00	Land and Land Rights	$ -					
34	390.00	Structures and Improvements	98,403					
35	391.00	Office Funiture and Equipment	60,492					
36	391.10	Computer Equipment	(68,300)					
37	392.00	Transportation Equipment	195,324					
38	393.00	Stores Equipment	1,464					
39	394.00	Tools, Shop and Garage	5,230					
40	395.00	Laboratory Equipment	4,716					
41	396.00	Power Operated Equipment	7,170					
42	397.00	Communication Equipment	69,591					
43	398.00	Miscellaneous Equipment	22,329					
44		**Subtotal General**	$ 396,420	$ -	$ -	$ -	$ -	$ -
45								
46			-					
47		ADFUC adjustment 3/95	(73,969)					
48		TOTAL WASTEWATER PLANT	$ 14,290,245	$ (210,266)	$ (395)	$ -	$ -	$ -
49								
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54								
55								
56								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Schedule B-2, Page 8
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decis	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American
Sun City West Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization						$ -	$ -
3	302.00	Franchises						-	-
4	303.00	Miscellaneous Intangibles						-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights						$ -	$ -
9	311.00	Structures and Improvements						-	1,636,500
10	312.00	Preliminary Treatment						-	582,392
11	313.00	Primary Treatment Equipment						-	535,800
12	314.00	Secondary Treatment Equipment						-	2,453,354
13	315.00	Tertiary Equipment						-	1,686,172
14	316.00	Disinfection Equipment						(210,266)	(48,264)
15	317.00	Effluent Lift Station E						-	459,319
16	318.00	Outfall Line						-	70,529
17	319.00	Sludge, Treatment & Distribution						-	-
18	321.00	Influent Lift Station						-	18,316
19	322.00	General Treatment Equipment						(68)	147,238
20		**Subtotal Treatment & Discharge**	$ -	$ -	$ -	$ -	$ -	$ (210,334)	$ 7,541,356
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights							$ -
24	341.00	Structures and Improvements						-	-
25	342.00	Collection System Lift						(327)	1,247,936
26	343.00	Collection Mains						-	3,966,296
27	344.00	Force Mains						-	220,480
28	345.00	Discharge Services						-	781,065
29	348.00	Manholes						-	-
30		**Subtotal Collection and Influent**	$ -	$ -	$ -	$ -	$ -	$ (327)	$ 6,215,777
31									
32		**Allocated Common Plant**							
33	389.00	Land and Land Rights			$ -			$ -	$ -
34	390.00	Structures and Improvements			-			-	98,403
35	391.00	Office Funiture and Equipment			-			-	60,492
36	391.10	Computer Equipment			(5,889)			(5,889)	(74,189)
37	392.00	Transportation Equipment			-			-	195,324
38	393.00	Stores Equipment			-			-	1,464
39	394.00	Tools, Shop and Garage			-			-	5,230
40	395.00	Laboratory Equipment			-			-	4,716
41	396.00	Power Operated Equipment			(59)			(59)	7,111
42	397.00	Communication Equipment			-			-	69,591
43	398.00	Miscellaneous Equipment			(2,420)			(2,420)	19,909
44		**Subtotal General**	$ -	$ -	$ (8,369)	$ -	$ -	$ (8,369)	$ 388,052
45									
46									-
47		ADFUC adjustment 3/95	73,969					73,969	(0)
48		TOTAL WASTEWATER PLANT	$ 73,969	$ -	$ (8,369)	$ -	$ -	$ (145,061)	$ 14,145,184
49									
50									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Line No.	
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Arizona American - Sun City West Wastewater
RCND Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 8,370	$ (4,292)	$ 4,078	$ -	$ -	$ -
3	302.00	Franchises	1,740	(368)	1,372	-	-	-
4	303.00	Miscellaneous Intangibles	5,946	(763)	5,184	-	-	-
5		**Subtotal Intangible**	$ 16,056	$ (5,423)	$ 10,634	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 745,494	$ (203,175)	$ 542,319	$ -	$ -	$ -
9	311.00	Structures and Improvements	4,503,916	(312,127)	4,191,789	2,663,448	(169,124)	2,494,324
10	312.00	Preliminary Treatment	1,696,378	(24,329)	1,672,050	905,282	(9,372)	895,910
11	313.00	Primary Treatment Equipment	1,615,967	(23,368)	1,592,599	785,325	(10,964)	774,361
12	314.00	Secondary Treatment Equipment	8,457,854	(95,150)	8,362,704	3,562,592	(38,472)	3,524,120
13	315.00	Tertiary Equipment	8,081,839	(147,481)	7,934,358	2,006,819	(32,323)	1,974,496
14	316.00	Disinfection Equipment	423,463	(386,445)	37,018	275,471	(330,380)	(54,909)
15	317.00	Effluent Lift Station E	1,311,801	(20,669)	1,291,132	587,022	(8,585)	578,437
16	318.00	Outfall Line	173,094	19,597	192,691	126,981	818	127,799
17	319.00	Sludge, Treatment & Distribution	-	(22,014)	(22,014)	195,586	(8,111)	187,475
18	321.00	Influent Lift Station	103,524	(7,266)	96,258	19,214	(153)	19,061
19	322.00	General Treatment Equipment	1,017,847	(36,987)	980,860	163,321	(4,740)	158,581
20		**Subtotal Treatment & Discharge**	$ 28,131,176	$ (1,259,413)	$ 26,871,763	$ 11,291,061	$ (611,405)	$ 10,679,655
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ 34,397	$ -	$ 34,397	$ -	$ -	$ -
24	341.00	Structures and Improvements	0	(14,444)	(14,444)	13,926	(2,228)	11,697
25	342.00	Collection System Lift	1,897,026	(48,678)	1,848,348	1,723,381	(42,751)	1,680,630
26	343.00	Collection Mains	21,040,445	(2,441,657)	18,598,788	5,761,586	(711,818)	5,049,768
27	344.00	Force Mains	1,568,335	(298,318)	1,270,017	450,814	(84,269)	366,545
28	345.00	Discharge Services	4,097,064	(593,388)	3,503,677	1,194,980	(169,166)	1,025,815
29	348.00	Manholes	0	(265,928)	(265,928)	584,507	(81,315)	503,192
30		**Subtotal Collection and Influent**	$ 28,637,268	$ (3,662,414)	$ 24,974,854	$ 9,729,194	$ (1,091,548)	$ 8,637,646
31								
32		**Allocated Common Plant**						
33	389.00	Land and Land Rights	$ 2,019	$ (1,239)	$ 780	$ -	$ -	$ -
34	390.00	Structures and Improvements	1,116,420	(18,977)	1,097,443	129,597	(2,651)	126,946
35	391.00	Office Funiture and Equipment	353,839	(9,635)	344,204	83,138	1,514	84,653
36	391.10	Computer Equipment	298,732	(109,760)	188,972	(76,112)	(5,676)	(81,788)
37	392.00	Transportation Equipment	317,988	(4,458)	313,530	214,101	(2,678)	211,423
38	393.00	Stores Equipment	5,990	62	6,052	1,971	57	2,029
39	394.00	Tools, Shop and Garage	89,252	(4,020)	85,232	4,570	66	4,635
40	395.00	Laboratory Equipment	29,599	(5,748)	23,850	5,419	(17)	5,401
41	396.00	Power Operated Equipment	24,681	261	24,943	9,289	68	9,357
42	397.00	Communication Equipment	138,782	30,779	169,561	82,850	(469)	82,381
43	398.00	Miscellaneous Equipment	63,072	(4,294)	58,778	33,230	(4,443)	28,788
44		**Subtotal General**	$ 2,440,373	$ (127,030)	$ 2,313,344	$ 488,053	$ (14,229)	$ 473,825
45								
46								
47		AFUDC adjustment 3/95	(292,741)	292,741	0	(89,214)	89,214	(0)
48		TOTAL WASTEWATER PLANT	$ 58,932,133	$ (4,761,538)	$ 54,170,595	$ 21,419,094	$ (1,627,968)	$ 19,791,126
49								
50		SUPPORTING SCHEDULES:						
51		Rebuttal B-3, page 2a, 2b, 3a, 3b						
52								
53								

Arizona American
Sun City West Wastewater
Common Plant Allocation
at December 31, 2002

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Original Cost	Rebuttal Allocated Original Cost	Rebuttal Allocated Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.15989	$ 780	$ 780	$ -	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.15989	535,503	535,503	-	49,720	49,720	-
5	391.00	Office Funiture and Equipment	0.15989	159,515	159,515	-	57,641	57,641	-
6	391.10	Computer Equipment	0.15989	228,379	131,176	(97,203)	(69,505)	(75,394)	(5,889)
7	392.00	Transportation Equipment	0.15989	287,389	287,389	-	165,992	165,992	-
8	393.00	Stores Equipment	0.15989	4,593	4,593	-	1,244	1,244	-
9	394.00	Tools, Shop and Garage	0.15989	65,723	65,723	-	2,916	2,916	-
10	395.00	Laboratory Equipment	0.15989	20,819	20,819	-	3,670	3,670	-
11	396.00	Power Operated Equipment	0.15989	19,239	19,132	(107)	6,845	6,786	(59)
12	397.00	Communication Equipment	0.15989	92,335	92,335	-	53,180	53,180	-
13	398.00	Miscellaneous Equipment	0.15989	44,306	41,886	(2,420)	20,539	18,119	(2,420)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 1,458,580	$ 1,358,851	$ (99,730)	$ 292,242	$ 283,874	$ (8,369)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-2, Page 5								
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1								
2	389.00	0	$ 4,880	$ -	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements	3,349,189	-	3,349,189	310,963	-	310,963
4	391.00	Office Funiture and Equipment	997,650	-	997,650	360,503	-	360,503
5	391.10	Computer Equipment	1,428,345	(607,932)	820,413	(434,702)	(36,834)	(471,536)
6	392.00	Transportation Equipment	1,797,409	-	1,797,409	1,038,162	-	1,038,162
7	393.00	Stores Equipment	28,727	-	28,727	7,782	-	7,782
8	394.00	Tools, Shop and Garage	411,051	-	411,051	18,237	-	18,237
9	395.00	Laboratory Equipment	130,207	-	130,207	22,954	-	22,954
10	396.00	Power Operated Equipment	120,325	(669)	119,656	42,813	(368)	42,444
11	397.00	Communication Equipment	577,488	-	577,488	332,600	-	332,600
12	398.00	Miscellaneous Equipment	277,101	(15,137)	261,964	128,455	(15,137)	113,318
13								
14								
15		TOTALCOMMON PLANT	$ 9,122,373	$ (623,738)	$ 8,498,635	$ 1,827,766	$ (52,339)	$ 1,775,427
16								
17			SUPPORTING SCHEDULES					
18			Rebuttal Schedule B-2, Page 6a, 6b, 7a, 7b					
19								
20								

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880						
3	390.00	Structures and Improvements	3,349,189						
4	391.00	Office Funiture and Equipment	997,650						
5	391.10	Computer Equipment	1,428,345		(607,932)				
6	392.00	Transportation Equipment	1,797,409						
7	393.00	Stores Equipment	28,727						
8	394.00	Tools, Shop and Garage	411,051						
9	395.00	Laboratory Equipment	130,207						
10	396.00	Power Operated Equipment	120,325		(669)				
11	397.00	Communication Equipment	577,488						
12	398.00	Miscellaneous Equipment	277,101	(458)		(14,679)			
13		**Subtotal General**	$ 9,122,373	$ (458)	$ (608,601)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
2	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
3	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
4		
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Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights							$ -	$ 4,880
3	390.00	Structures and Improvements							-	3,349,189
4	391.00	Office Funiture and Equipment							-	997,650
5	391.10	Computer Equipment							(607,932)	820,413
6	392.00	Transportation Equipment							-	1,797,409
7	393.00	Stores Equipment							-	28,727
8	394.00	Tools, Shop and Garage							-	411,051
9	395.00	Laboratory Equipment							-	130,207
10	396.00	Power Operated Equipment							(669)	119,656
11	397.00	Communication Equipment							-	577,488
12	398.00	Miscellaneous Equipment							(15,137)	261,964
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (623,738)	$ 8,498,635
14										

ADJ #	Reference
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Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7a
Witness: Bour

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -						
3	390.00	Structures and Improvements	310,963						
4	391.00	Office Funiture and Equipment	360,503						
5	391.10	Computer Equipment	(434,702)		(36,834)				
6	392.00	Transportation Equipment	1,038,162						
7	393.00	Stores Equipment	7,782						
8	394.00	Tools, Shop and Garage	18,237						
9	395.00	Laboratory Equipment	22,954						
10	396.00	Power Operated Equipment	42,813		(368)				
11	397.00	Communication Equipment	332,600						
12	398.00	Miscellaneous Equipment	128,455	(458)		(14,679)			
13		**Subtotal General**	$ 1,827,766	$ (458)	$ (37,202)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
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21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights							$ -	$ -
3	390.00	Structures and Improvements							-	310,963
4	391.00	Office Funiture and Equipment							-	360,503
5	391.10	Computer Equipment							(36,834)	(471,536)
6	392.00	Transportation Equipment							-	1,038,162
7	393.00	Stores Equipment							-	7,782
8	394.00	Tools, Shop and Garage							-	18,237
9	395.00	Laboratory Equipment							-	22,954
10	396.00	Power Operated Equipment							(368)	42,444
11	397.00	Communication Equipment							-	332,600
12	398.00	Miscellaneous Equipment							(15,137)	113,318
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (52,339)	$ 1,775,427
14										

ADJ #	Reference
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Arizona-American Sun City West Wastewater
Plant Not Used and Useful

Exhibit
Rebuttal Schedule B-2
Page 8

Asset Id	Asset Desc.	Class	Acq. Date	Original Cost	A/D	RCN	Adjust O.C.	Adjust A/D	Adjust RCND	Adj.RCN A/D
1677221	Disinfection Equ	T31600	19800701	207,182	(148,310)	378,770	(207,182)	(207,182)	(378,770)	(378,770)
1679440	CHLORINE MACHINE	T31600	19940115	1,167	(357)	1,468	(1,167)	(1,167)	(1,468)	(1,468)
1679442	PIPING	T31600	19940115	673	(194)	846	(673)	(673)	(846)	(846)
1679441	CHLORINE MACHINE	T31600	19941215	740	(224)	911	(740)	(740)	(911)	(911)
1679890	CHLORINE MACHINE	T31600	19951215	569	(147)	679	(569)	(147)	(679)	(176)
1680479	CHLORINE DETECTO	T31600	19971215	1,058	(234)	1,213	(1,058)	(234)	(1,213)	(269)
1680701	PIPING	T31600	19981215	399	(70)	449	(399)	(70)	(449)	(79)
1680702	WEIGHING EQUIPME	T31600	19981215	294	(53)	331	(294)	(53)	(331)	(59)
			Totals	212,082	(149,590)	384,668	(212,082)	(210,266)	(384,668)	(382,579)

Arizona-American Sun City West Wastewater
Unidentified Plant

Exhibit
Rebuttal Schedule B-2
Page 8

Asset Id	Asset Desc.	Class	Acq. Date	Original Cost	A/D	RCN	Adjust O.C.	Adjust A/D	Adjust RCND	Adj.RCN A/D
3118671		T32200	20010731	2,987	(68)	2,987	(2,987)	(68)	(2,987)	(68)
3117979		T34200	20010731	56	(2)	56	(56)	(2)	(56)	(2)
3119014		T34200	20010731	324	(12)	324	(324)	(324)	(324)	(324)
				380	(15)	380	(380)	(327)	(380)	(327)

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
RCND Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-3
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 58,932,134	(1)	(4,761,538)	$ 54,170,595
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	21,419,094	(2)	(1,627,968)	19,791,126
8					
9	Net Utility Plant				
10	in Service	$ 37,513,040			$ 34,379,469
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	21,858,105	(3)	(1,725,164)	20,132,941
15	Contributions in Aid of				
16	Construction - Net (Ratemaking	2,198,432	(4)	(173,513)	2,024,919
17	Purposes Only)				
18	Customer Meter Deposits	525			525
19	Deferred Income Taxes	-			-
20	Investment Tax Credits	-			-
21	**Plus:**				
22	Deferred Finance				
23	Charges	-			-
24	Deferred Tax Assets	-			-
25	Working capital	-			-
26	Citizens Acquisition Adjustment	-			-
27					
28	Total	$ 13,455,978			$ 12,221,084
29					
30					
31					
32	(1) See B-3, Page 2				
33	(2) See B-3, Page 3				
34	(3) Adjust AIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
35	(4) Adjust CIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
36					
37					

Arizona American - Sun City West Wastewater
RCND Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 8,370	$ (4,292)	$ 4,078	$ -	$ -	$ -
3	302.00	Franchises	1,740	(368)	1,372	-	-	-
4	303.00	Miscellaneous Intangibles	5,946	(763)	5,184	-	-	-
5		**Subtotal Intangible**	$ 16,056	$ (5,423)	$ 10,634	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 745,494	$ (203,175)	$ 542,319	$ -	$ -	$ -
9	311.00	Structures and Improvements	4,503,916	(312,127)	4,191,789	2,663,448	(169,124)	2,494,324
10	312.00	Preliminary Treatment	1,696,378	(24,329)	1,672,050	905,282	(9,372)	895,910
11	313.00	Primary Treatment Equipment	1,615,967	(23,368)	1,592,599	785,325	(10,964)	774,361
12	314.00	Secondary Treatment Equipment	8,457,854	(95,150)	8,362,704	3,562,592	(38,472)	3,524,120
13	315.00	Tertiary Equipment	8,081,839	(147,481)	7,934,358	2,006,819	(32,323)	1,974,496
14	316.00	Disinfection Equipment	423,463	(386,445)	37,018	275,471	(330,380)	(54,909)
15	317.00	Effluent Lift Station E	1,311,801	(20,669)	1,291,132	587,022	(8,585)	578,437
16	318.00	Outfall Line	173,094	19,597	192,691	126,981	818	127,799
17	319.00	Sludge, Treatment & Distribution	-	(22,014)	(22,014)	195,586	(8,111)	187,475
18	321.00	Influent Lift Station	103,524	(7,266)	96,258	19,214	(153)	19,061
19	322.00	General Treatment Equipment	1,017,847	(36,987)	980,860	163,321	(4,740)	158,581
20		**Subtotal Treatment & Discharge**	$ 28,131,176	$ (1,259,413)	$ 26,871,763	$ 11,291,061	$ (611,405)	$ 10,679,655
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ 34,397	$ -	$ 34,397	$ -	$ -	$ -
24	341.00	Structures and Improvements	0	(14,444)	(14,444)	13,926	(2,228)	11,697
25	342.00	Collection System Lift	1,897,026	(48,678)	1,848,348	1,723,381	(42,751)	1,680,630
26	343.00	Collection Mains	21,040,445	(2,441,657)	18,598,788	5,761,586	(711,818)	5,049,768
27	344.00	Force Mains	1,568,335	(298,318)	1,270,017	450,814	(84,269)	366,545
28	345.00	Discharge Services	4,097,064	(593,388)	3,503,677	1,194,980	(169,166)	1,025,815
29	348.00	Manholes	0	(265,928)	(265,928)	584,507	(81,315)	503,192
30		**Subtotal Collection and Influent**	$ 28,637,268	$ (3,662,414)	$ 24,974,854	$ 9,729,194	$ (1,091,548)	$ 8,637,646
31								
32		**Allocated Common Plant**						
33	389.00	Land and Land Rights	$ 2,019	$ (1,239)	$ 780	$ -	$ -	$ -
34	390.00	Structures and Improvements	1,116,420	(18,977)	1,097,443	129,597	(2,651)	126,946
35	391.00	Office Funiture and Equipment	353,839	(9,635)	344,204	83,138	1,514	84,653
36	391.10	Computer Equipment	298,732	(109,760)	188,972	(76,112)	(5,676)	(81,788)
37	392.00	Transportation Equipment	317,988	(4,458)	313,530	214,101	(2,678)	211,423
38	393.00	Stores Equipment	5,990	62	6,052	1,971	57	2,029
39	394.00	Tools, Shop and Garage	89,252	(4,020)	85,232	4,570	66	4,635
40	395.00	Laboratory Equipment	29,599	(5,748)	23,850	5,419	(17)	5,401
41	396.00	Power Operated Equipment	24,681	261	24,943	9,289	68	9,357
42	397.00	Communication Equipment	138,782	30,779	169,561	82,850	(469)	82,381
43	398.00	Miscellaneous Equipment	63,072	(4,294)	58,778	33,230	(4,443)	28,788
44		**Subtotal General**	$ 2,440,373	$ (127,030)	$ 2,313,344	$ 488,053	$ (14,229)	$ 473,825
45								
46								
47		AFUDC adjustment 3/95	(292,741)	292,741	0	(89,214)	89,214	(0)
48		TOTAL WASTEWATER PLANT	$ 58,932,133	$ (4,761,538)	$ 54,170,595	$ 21,419,094	$ (1,627,968)	$ 19,791,126
49								
50		SUPPORTING SCHEDULES:						
51		Rebuttal B-3, page 2a, 2b, 3a, 3b						
52								
53								

Arizona American
Sun City West Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 8,370					$ -
3	302.00	Franchises	1,740					-
4	303.00	Miscellaneous Intangibles	5,946					-
5		**Subtotal Intangible**	$ 16,056	$ -	$ -	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 745,494					$ -
9	311.00	Structures and Improvements	4,503,916					(21,563)
10	312.00	Preliminary Treatment	1,696,378					(6,300)
11	313.00	Primary Treatment Equipment	1,615,967					-
12	314.00	Secondary Treatment Equipment	8,457,854					-
13	315.00	Tertiary Equipment	8,081,839					-
14	316.00	Disinfection Equipment	423,463	(384,668)				-
15	317.00	Effluent Lift Station E	1,311,801					-
16	318.00	Outfall Line	173,094					18,461
17	319.00	Sludge, Treatment & Distribution	-					-
18	321.00	Influent Lift Station	103,524					(6,300)
19	322.00	General Treatment Equipment	1,017,847		(2,987)			-
20		**Subtotal Treatment & Discharge**	$ 28,131,176	$ (384,668)	$ (2,987)	$ -	$ -	$ (15,702)
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ 34,397					$ -
24	341.00	Structures and Improvements	0					-
25	342.00	Collection System Lift	1,897,026		(380)			-
26	343.00	Collection Mains	21,040,445					(4,544)
27	344.00	Force Mains	1,568,335					-
28	345.00	Discharge Services	4,097,064					-
29	348.00	Manholes	0					-
30		**Subtotal Collection and Influent**	$ 28,637,268	$ -	$ (380)	$ -	$ -	$ (4,544)
31								
32		**Allocated Common Plant**						
33	389.00	Land and Land Rights	$ 2,019					$ -
34	390.00	Structures and Improvements	1,116,420					-
35	391.00	Office Funiture and Equipment	353,839					(9,826)
36	391.10	Computer Equipment	298,732					-
37	392.00	Transportation Equipment	317,988					-
38	393.00	Stores Equipment	5,990					-
39	394.00	Tools, Shop and Garage	89,252					(3,880)
40	395.00	Laboratory Equipment	29,599					(5,500)
41	396.00	Power Operated Equipment	24,681					-
42	397.00	Communication Equipment	138,782					32,468
43	398.00	Miscellaneous Equipment	63,072					-
44		**Subtotal General**	$ 2,440,373	$ -	$ -	$ -	$ -	$ 13,262
45								
46			-					
47		ADFUC adjustment 3/95	(292,741)					
48		TOTAL WASTEWATER PLANT	$ 58,932,133	$ (384,668)	$ (3,367)	$ -	$ -	$ (6,983)
49								
50								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Sched B-3, Page 8
2	Unidentified Plant	Rebuttal Sched B-3, Page 8
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decision	Blank
5	Post Test Year Plant	ACC Staff

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Arizona American
Sun City West Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Blank Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Trended Reproduction Cost New
1		**Intangible**							
2	301.00	Organization				$ (4,292)		$ (4,292)	$ 4,078
3	302.00	Franchises				(368)		(368)	1,372
4	303.00	Miscellaneous Intangibles				(763)		(763)	5,184
5		**Subtotal Intangible**	$ -	$ -	$ -	$ (5,423)	$ -	$ (5,423)	$ 10,634
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights				$ (203,175)		$ (203,175)	$ 542,319
9	311.00	Structures and Improvements				(290,564)		(312,127)	4,191,789
10	312.00	Preliminary Treatment				(18,029)		(24,329)	1,672,050
11	313.00	Primary Treatment Equipment				(23,368)		(23,368)	1,592,599
12	314.00	Secondary Treatment Equipment				(95,150)		(95,150)	8,362,704
13	315.00	Tertiary Equipment				(147,481)		(147,481)	7,934,358
14	316.00	Disinfection Equipment				(1,776)		(386,445)	37,018
15	317.00	Effluent Lift Station E				(20,669)		(20,669)	1,291,132
16	318.00	Outfall Line				1,136		19,597	192,691
17	319.00	Sludge, Treatment & Distribution				(22,014)		(22,014)	(22,014)
18	321.00	Influent Lift Station				(966)		(7,266)	96,258
19	322.00	General Treatment Equipment				(34,000)		(36,987)	980,860
20		**Subtotal Treatment & Discharge**	$ -	$ -	$ -	$ (856,056)	$ -	$ (1,259,413)	$ 26,871,763
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights				$ (13,650)			$ 34,397
24	341.00	Structures and Improvements				(14,444)		(14,444)	(14,444)
25	342.00	Collection System Lift				(48,298)		(48,678)	1,848,348
26	343.00	Collection Mains				(2,437,114)		(2,441,657)	18,598,788
27	344.00	Force Mains				(298,318)		(298,318)	1,270,017
28	345.00	Discharge Services				(593,388)		(593,388)	3,503,677
29	348.00	Manholes				(265,928)		(265,928)	(265,928)
30		**Subtotal Collection and Influent**	$ -	$ -	$ -	$ (3,671,140)	$ -	$ (3,662,414)	$ 24,974,854
31									
32		**Allocated Common Plant**							
33	389.00	Land and Land Rights			$ (1,239)			$ (1,239)	$ 780
34	390.00	Structures and Improvements			(18,977)			(18,977)	1,097,443
35	391.00	Office Furniture and Equipment			190			(9,635)	344,204
36	391.10	Computer Equipment			(109,760)			(109,760)	188,972
37	392.00	Transportation Equipment			(4,458)			(4,458)	313,530
38	393.00	Stores Equipment			62			62	6,052
39	394.00	Tools, Shop and Garage			(140)			(4,020)	85,232
40	395.00	Laboratory Equipment			(248)			(5,748)	23,850
41	396.00	Power Operated Equipment			261			261	24,943
42	397.00	Communication Equipment			(1,689)			30,779	169,561
43	398.00	Miscellaneous Equipment			(4,294)			(4,294)	58,778
44		**Subtotal General**	$ -	$ -	$ (140,292)	$ -	$ -	$ (127,030)	$ 2,313,344
45									
46									-
47		ADFUC adjustment 3/95	292,741					292,741	0
48		TOTAL WASTEWATER PLANT	$ 292,741	$ -	$ (140,292)	$ (4,532,619)	$ -	$ (4,761,538)	$ 54,170,595
49									
50									
51									
52									
53									
54									
55									
56									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American
Sun City West Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Line No.	Direct Accumulated Depreciation	Not Used Adjustment 1	Unidentified Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**	1			-			
2	301.00	Organization	2	$ -		$ -			
3	302.00	Franchises	3	-		-			
4	303.00	Miscellaneous Intangibles	4	-		-			
5		**Subtotal Intangible**	5	$ -	$ -	$ -	$ -	$ -	$ -
6			6						
7		**Treatment & Discharge**	7						
8	310.00	Land and Land Rights	8	$ -		$ -			
9	311.00	Structures and Improvements	9	2,663,448		-			
10	312.00	Preliminary Treatment	10	905,282		-			
11	313.00	Primary Treatment Equipment	11	785,325		-			
12	314.00	Secondary Treatment Equipment	12	3,562,592		-			
13	315.00	Tertiary Equipment	13	2,006,819		-			
14	316.00	Disinfection Equipment	14	275,471	(382,579)	-			
15	317.00	Effluent Lift Station E	15	587,022		-			
16	318.00	Outfall Line	16	126,981		-			
17	319.00	Sludge, Treatment & Distribution	17	195,586		-			
18	321.00	Influent Lift Station	18	19,214		-			
19	322.00	General Treatment Equipment	19	163,321		(68)			
20		**Subtotal Treatment & Discharge**	20	$ 11,291,061	$ (382,579)	$ (68)	$ -	$ -	$ -
21			21						
22		**Collection and Influent**	22						
23	340.00	Land and Land Rights	23	$ -					
24	341.00	Structures and Improvements	24	13,926					
25	342.00	Collection System Lift	25	1,723,381		(327)			
26	343.00	Collection Mains	26	5,761,586		-			
27	344.00	Force Mains	27	450,814		-			
28	345.00	Discharge Services	28	1,194,980		-			
29	348.00	Manholes	29	584,507		-			
30		**Subtotal Collection and Influent**	30	$ 9,729,194	$ -	$ (327)	$ -	$ -	$ -
31			31						
32		**Allocated Common Plant**	32						
33	389.00	Land and Land Rights	33	$ -		$ -			
34	390.00	Structures and Improvements	34	129,597		-			
35	391.00	Office Funiture and Equipment	35	83,138		-			
36	391.10	Computer Equipment	36	(76,112)		-			
37	392.00	Transportation Equipment	37	214,101		-			
38	393.00	Stores Equipment	38	1,971		-			
39	394.00	Tools, Shop and Garage	39	4,570		-			
40	395.00	Laboratory Equipment	40	5,419		-			
41	396.00	Power Operated Equipment	41	9,289		-			
42	397.00	Communication Equipment	42	82,850		-			
43	398.00	Miscellaneous Equipment	43	33,230		-			
44		**Subtotal General**	44	$ 488,053	$ -	$ -	$ -	$ -	$ -
45			45						
46			46	-		-			
47		ADFUC adjustment 3/95	47	(89,214)		-			
48		TOTAL WASTEWATER PLANT	48	$ 21,419,094	$ (382,579)	$ (395)	$ -	$ -	$ -
49			49						
50			50						

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Sched B-3, Page 8
2	Unidentified Plant	Rebuttal Sched B-3, Page 8
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decision	Blank
5	Post Test Year Plant	ACC Staff

Arizona American
Sun City West Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Blank Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization				$ -		$ -	$ -
3	302.00	Franchises				-		-	-
4	303.00	Miscellaneous Intangibles				-		-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights				$ -		$ -	$ -
9	311.00	Structures and Improvements				(169,124)		(169,124)	2,494,324
10	312.00	Preliminary Treatment				(9,372)		(9,372)	895,910
11	313.00	Primary Treatment Equipment				(10,964)		(10,964)	774,361
12	314.00	Secondary Treatment Equipment				(38,472)		(38,472)	3,524,120
13	315.00	Tertiary Equipment				(32,323)		(32,323)	1,974,496
14	316.00	Disinfection Equipment				52,199		(330,380)	(54,909)
15	317.00	Effluent Lift Station E				(8,585)		(8,585)	578,437
16	318.00	Outfall Line				818		818	127,799
17	319.00	Sludge, Treatment & Distribution				(8,111)		(8,111)	187,475
18	321.00	Influent Lift Station				(153)		(153)	19,061
19	322.00	General Treatment Equipment				(4,671)		(4,740)	158,581
20		**Subtotal Treatment & Discharge**	$ -	$ -	$ -	$ (228,758)	$ -	$ (611,405)	$ 10,679,655
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights				$ -			$ -
24	341.00	Structures and Improvements				(2,228)		(2,228)	11,697
25	342.00	Collection System Lift				(42,425)		(42,751)	1,680,630
26	343.00	Collection Mains				(711,818)		(711,818)	5,049,768
27	344.00	Force Mains				(84,269)		(84,269)	366,545
28	345.00	Discharge Services				(169,166)		(169,166)	1,025,815
29	348.00	Manholes				(81,315)		(81,315)	503,192
30		**Subtotal Collection and Influent**	$ -	$ -	$ -	$ (1,091,222)	$ -	$ (1,091,548)	$ 8,637,646
31									
32		**Allocated Common Plant**							
33	389.00	Land and Land Rights			$ -			$ -	$ -
34	390.00	Structures and Improvements			(2,651)			(2,651)	126,946
35	391.00	Office Funiture and Equipment			1,514			1,514	84,653
36	391.10	Computer Equipment			(5,676)			(5,676)	(81,788)
37	392.00	Transportation Equipment			(2,678)			(2,678)	211,423
38	393.00	Stores Equipment			57			57	2,029
39	394.00	Tools, Shop and Garage			66			66	4,635
40	395.00	Laboratory Equipment			(17)			(17)	5,401
41	396.00	Power Operated Equipment			68			68	9,357
42	397.00	Communication Equipment			(469)			(469)	82,381
43	398.00	Miscellaneous Equipment			(4,443)			(4,443)	28,788
44		**Subtotal General**	$ -	$ -	$ (14,229)	$ -	$ -	$ (14,229)	$ 473,825
45									
46									-
47		ADFUC adjustment 3/95	89,214					89,214	(0)
48		TOTAL WASTEWATER PLANT	$ 89,214	$ -	$ (14,229)	$ (1,319,980)	$ -	$ (1,627,968)	$ 19,791,126
49									
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51									
52									
53									
54									
55									
56									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American
Sun City West Wastewater
RCND Common Plant Allocation
at December 31, 2002

Exhibit
Rebuttal Schedule B-3
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Trended Amount	Rebuttal Allocated Trended Amount	Rebuttal Allocated Trended Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.15989	$ 2,019	$ 780	$ (1,239)	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.15989	726,793	707,816	(18,977)	80,914	78,263	(2,651)
5	391.00	Office Funiture and Equipment	0.15989	205,772	205,962	190	80,288	81,802	1,514
6	391.10	Computer Equipment	0.15989	254,025	144,265	(109,760)	(77,316)	(82,992)	(5,676)
7	392.00	Transportation Equipment	0.15989	317,988	313,530	(4,458)	184,769	182,091	(2,678)
8	393.00	Stores Equipment	0.15989	5,990	6,052	62	1,751	1,809	57
9	394.00	Tools, Shop and Garage	0.15989	83,752	83,612	(140)	2,255	2,321	66
10	395.00	Laboratory Equipment	0.15989	24,099	23,850	(248)	4,373	4,356	(17)
11	396.00	Power Operated Equipment	0.15989	24,681	24,943	261	8,964	9,032	68
12	397.00	Communication Equipment	0.15989	111,582	109,892	(1,689)	66,438	65,969	(469)
13	398.00	Miscellaneous Equipment	0.15989	63,072	58,778	(4,294)	31,440	26,997	(4,443)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 1,819,772	$ 1,679,480	$ (140,292)	$ 383,876	$ 369,647	$ (14,229)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-3, Page 5								
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 5
Witness: Bourassa

Line No.	Account No.	Description		Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Trended Direct Accumulated Depreciation	Adjustment	Rebuttal Trended Accumulated Depreciation
1									
2	389.00		0	$ 12,628	$ (7,748)	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements		4,545,571	(118,688)	4,426,882	506,059	(16,579)	489,480
4	391.00	Office Funiture and Equipment		1,286,955	1,191	1,288,146	502,142	9,471	511,613
5	391.10	Computer Equipment		1,588,744	(686,472)	902,272	(483,558)	(35,499)	(519,057)
6	392.00	Transportation Equipment		1,988,785	(27,882)	1,960,903	1,155,595	(16,750)	1,138,845
7	393.00	Stores Equipment		37,463	387	37,850	10,952	359	11,312
8	394.00	Tools, Shop and Garage		523,808	(874)	522,934	14,105	411	14,516
9	395.00	Laboratory Equipment		150,719	(1,554)	149,166	27,352	(109)	27,243
10	396.00	Power Operated Equipment		154,364	1,634	155,998	56,063	425	56,488
11	397.00	Communication Equipment		697,864	(10,566)	687,298	415,524	(2,934)	412,590
12	398.00	Miscellaneous Equipment		394,470	(26,855)	367,615	196,632	(27,786)	168,847
13									
14									
15		TOTALCOMMON PLANT		$ 11,381,370	$ (877,427)	$ 10,503,943	$ 2,400,866	$ (88,989)	$ 2,311,877
16									
17				SUPPORTING SCHEDULES					
18				Rebuttal Schedule B-3, Page 6a, 6b, 7a, 7b					
19									
20									

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6a

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880				(6,755)	-	-
3	390.00	Structures and Improvements	3,349,189				(78,054)	-	(2,575)
4	391.00	Office Funiture and Equipment	997,650				5,995	(2,202)	6,085
5	391.10	Computer Equipment	1,428,345		(670,782)		(12,717)	-	(2,402)
6	392.00	Transportation Equipment	1,797,409				(14,376)	(109)	(3,537)
7	393.00	Stores Equipment	28,727				732	-	59
8	394.00	Tools, Shop and Garage	411,051				1,875	(1,135)	(212)
9	395.00	Laboratory Equipment	130,207				(52)	-	116
10	396.00	Power Operated Equipment	120,325		(799)		3,730	-	(1,226)
11	397.00	Communication Equipment	577,488				(1,313)	-	1,715
12	398.00	Miscellaneous Equipment	277,101	(670)		(39,030)	12,635	(43)	454
13		**Subtotal General**	$ 9,122,373	$ (670)	$ (671,581)	$ (39,030)	$ (88,300)	$ (3,489)	$ (1,523)
14									
15									
16									
17									
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20									
21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights	-	(993)	-	-	-		$ (7,748)	$ (2,868)
3	390.00	Structures and Improvements	(17,341)	(10)	(3,192)	(2,612)	(14,906)		(118,688)	3,230,501
4	391.00	Office Funiture and Equipment	(4,567)	(247)	(2,019)	(906)	(947)		1,191	998,841
5	391.10	Computer Equipment	241	(255)	(556)	-	-		(686,472)	741,874
6	392.00	Transportation Equipment	(5,231)	(404)	(4,372)	148	-		(27,882)	1,769,527
7	393.00	Stores Equipment	(246)	(158)	-	-	-		387	29,114
8	394.00	Tools, Shop and Garage	(1,038)	(270)	(94)	-	-		(874)	410,177
9	395.00	Laboratory Equipment	124	-	-	(727)	(1,015)		(1,554)	128,654
10	396.00	Power Operated Equipment	11	-	-	(82)	-		1,634	121,959
11	397.00	Communication Equipment	(10,889)	(83)	3	-	-		(10,566)	566,923
12	398.00	Miscellaneous Equipment	413	(17)	(609)	11	-		(26,855)	250,246
13		**Subtotal General**	$ (38,523)	$ (2,436)	$ (10,839)	$ (4,168)	$ (16,868)	$ -	$ (877,427)	$ 8,244,946
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 7a

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -				-	-	-
3	390.00	Structures and Improvements	310,963				(14,303)	-	(901)
4	391.00	Office Funiture and Equipment	360,503				3,247	526	6,108
5	391.10	Computer Equipment	(434,702)		(40,657)		5,273	-	118
6	392.00	Transportation Equipment	1,038,162				(9,526)	(109)	(2,171)
7	393.00	Stores Equipment	7,782				357	-	46
8	394.00	Tools, Shop and Garage	18,237				175	442	(60)
9	395.00	Laboratory Equipment	22,954				(18)	-	43
10	396.00	Power Operated Equipment	42,813		(440)		1,414	-	(546)
11	397.00	Communication Equipment	332,600				(1,154)	-	1,730
12	398.00	Miscellaneous Equipment	128,455	(670)		(39,030)	8,302	3,466	213
13		**Subtotal General**	$ 1,827,766	$ (670)	$ (41,096)	$ (39,030)	$ (6,233)	$ 4,325	$ 4,581
14									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
7b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights	-	-	-	-	-		$ -	$ -
3	390.00	Structures and Improvements	(492)	(2)	(259)	(93)	(529)		(16,579)	294,384
4	391.00	Office Funiture and Equipment	82	(44)	(274)	(80)	(94)		9,471	369,974
5	391.10	Computer Equipment	(9)	(178)	(48)	-	-		(35,499)	(470,201)
6	392.00	Transportation Equipment	(1,564)	(313)	(3,018)	(49)	-		(16,750)	1,021,413
7	393.00	Stores Equipment	5	(48)	-	-	-		359	8,141
8	394.00	Tools, Shop and Garage	(89)	(38)	(19)	-	-		411	18,648
9	395.00	Laboratory Equipment	28	-	-	(58)	(104)		(109)	22,845
10	396.00	Power Operated Equipment	1	-	-	(4)	-		425	43,238
11	397.00	Communication Equipment	(3,485)	(28)	3	-	-		(2,934)	329,666
12	398.00	Miscellaneous Equipment	150	(3)	(213)	0	-		(27,786)	100,670
13		**Subtotal General**	$ (5,372)	$ (654)	$ (3,829)	$ (284)	$ (727)	$ -	$ (88,989)	$ 1,738,777
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona-American Sun City West Wastewater
B-3 Adjustments

Exhibit B-4
Page A1
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	B-2 Adjustments	Adjusted Original Cost	O.C. A/D	B-2 Adjustments	O.C. Adjusted A/D
1		**Intangible**						
2	301.00	Organization	4,078	-	4,078	-	-	-
3	302.00	Franchises	1,372	-	1,372	-	-	-
4	303.00	Miscellaneous Intangibles	5,184	-	5,184	-	-	-
5		**Subtotal Intangible**	10,634	-	10,634	-	-	-
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	542,319	-	542,319	-	-	-
9	311.00	Structures and Improvements	2,695,860	-	2,695,860	1,569,131	-	1,569,131
10	312.00	Preliminary Treatment	1,068,943	-	1,068,943	555,679	-	555,679
11	313.00	Primary Treatment Equipment	1,084,172	-	1,084,172	508,707	-	508,707
12	314.00	Secondary Treatment Equipm	5,714,476	-	5,714,476	2,310,550	-	2,310,550
13	315.00	Tertiary Equipment	4,751,190	-	4,751,190	1,041,309	-	1,041,309
14	316.00	Disinfection Equipment	245,070	(212,082)	32,988	155,878	(210,266)	(54,388)
15	317.00	Effluent Lift Station E	1,004,341	-	1,004,341	417,153	-	417,153
16	318.00	Outfall Line	94,680	-	94,680	68,163	-	68,163
17	319.00	Sludge, Treatment & Distributi	1,337,304	-	1,337,304	492,725	-	492,725
18	321.00	Influent Lift Station	91,546	-	91,546	14,473	-	14,473
19	322.00	General Treatment Equipment	902,060	(2,987)	899,073	124,764	(68)	124,696
20		**Subtotal Treat & Disc**	19,531,960	(215,068)	19,316,892	7,258,533	(210,334)	7,048,198
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	20,747	-	20,747	-	-	-
24	341.00	Structures and Improvements	299,361	-	299,361	46,184	-	46,184
25	342.00	Collection System Lift	1,356,167	(380)	1,355,787	1,191,327	(327)	1,191,000
26	343.00	Collection Mains	9,788,254	-	9,788,254	2,858,898	-	2,858,898
27	344.00	Force Mains	752,939	-	752,939	212,690	-	212,690
28	345.00	Discharge Services	2,645,161	-	2,645,161	754,095	-	754,095
29	348.00	Manholes	3,189,365	-	3,189,365	975,240	-	975,240
30		**Subtotal Coll.and Infl.**	18,051,994	(380)	18,051,614	6,038,435	(327)	6,038,108
31								
32		**General**						
33	389.00	Land and Land Rights	-	-	-	-	-	-
34	390.00	Structures and Improvements	1,196,116	-	1,196,116	33,935	-	33,935
35	391.00	Office Funiture and Equipmen	142,714	-	142,714	(2,555)	-	(2,555)
36	391.10	Computer Equipment	34,067	-	34,067	(1,205)	-	(1,205)
37	392.00	Transportation Equipment	234,751	-	234,751	70,168	-	70,168
38	393.00	Stores Equipment	11,270	-	11,270	(243)	-	(243)
39	394.00	Tools, Shop and Garage	103,615	-	103,615	8,865	-	8,865
40	395.00	Laboratory Equipment	56,408	-	56,408	12,616	-	12,616
41	396.00	Power Operated Equipment	12,955	-	12,955	1,655	-	1,655
42	397.00	Communication Equipment	318,807	-	318,807	102,047	-	102,047
43	398.00	Miscellaneous Equipment	70,250	-	70,250	25,529	-	25,529
44		**Subtotal General**	2,180,953	-	2,180,953	250,813	-	250,813
45								
46								
47								
48		TOTAL WASTEWATER PL	39,775,540	(215,448)	39,560,092	13,547,781	(210,661)	13,337,120
49								

Arizona-American Sun City West Wastewater
B-3 Adjustments

Exhibit B-4
Page A2
Witness: Bourassa

Line No.	Account No.	Description	RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted RCN	Adjustment (B-3, page 2b, Adj. #9) RCN Direct to RCN Rebuttal	Adjusted RCN Rebuttal
1		**Intangible**					
2	301.00	Organization	8,370	-	8,370	(4,292)	4,078
3	302.00	Franchises	1,740	-	1,740	(368)	1,372
4	303.00	Miscellaneous Intangibles	5,946	-	5,946	(763)	5,184
5		**Subtotal Intangible**	16,056	-	16,056	(5,423)	10,634
6							
7		**Treatment & Discharge**					
8	310.00	Land and Land Rights	745,494	-	745,494	(203,175)	542,319
9	311.00	Structures and Improvements	4,460,216	-	4,460,216	(290,564)	4,169,652
10	312.00	Preliminary Treatment	1,690,078	-	1,690,078	(18,029)	1,672,050
11	313.00	Primary Treatment Equipment	1,615,967	-	1,615,967	(23,368)	1,592,599
12	314.00	Secondary Treatment Equipm	8,457,854	-	8,457,854	(95,150)	8,362,704
13	315.00	Tertiary Equipment	6,214,209	-	6,214,209	(147,481)	6,066,728
14	316.00	Disinfection Equipment	423,463	(384,668)	38,795	(1,776)	37,018
15	317.00	Effluent Lift Station E	1,311,801	-	1,311,801	(20,669)	1,291,132
16	318.00	Outfall Line	173,094	-	173,094	1,136	174,230
17	319.00	Sludge, Treatment & Distributi	1,868,143	-	1,868,143	(22,014)	1,846,129
18	321.00	Influent Lift Station	97,224	-	97,224	(966)	96,258
19	322.00	General Treatment Equipment	1,017,847	(2,987)	1,014,860	(34,000)	980,860
20		**Subtotal Treat & Disc**	28,075,389	(387,655)	27,687,734	(856,056)	26,831,678
21							
22		**Collection and Influent**					
23	340.00	Land and Land Rights	34,397	-	34,397	(13,650)	20,747
24	341.00	Structures and Improvements	389,627	-	389,627	(14,444)	375,183
25	342.00	Collection System Lift	1,897,026	(380)	1,896,646	(48,298)	1,848,348
26	343.00	Collection Mains	15,934,945	-	15,934,945	(2,437,114)	13,497,831
27	344.00	Force Mains	1,568,335	-	1,568,335	(298,318)	1,270,017
28	345.00	Discharge Services	4,097,064	-	4,097,064	(593,388)	3,503,677
29	348.00	Manholes	5,100,900	-	5,100,900	(265,928)	4,834,972
30		**Subtotal Coll.and Infl.**	29,022,295	(380)	29,021,915	(3,671,140)	25,350,775
31							
32		**General**				**(Common Plant, B-2, Page 6)**	
33	389.00	Land and Land Rights	-	-	-	-	-
34	390.00	Structures and Improvements	1,283,529	-	1,283,529	(17,341)	1,266,188
35	391.00	Office Funiture and Equipmen	162,862	-	162,862	(4,567)	158,295
36	391.10	Computer Equipment	35,611	-	35,611	241	35,851
37	392.00	Transportation Equipment	256,541	-	256,541	(5,231)	251,310
38	393.00	Stores Equipment	13,263	-	13,263	(246)	13,016
39	394.00	Tools, Shop and Garage	114,584	-	114,584	(1,038)	113,547
40	395.00	Laboratory Equipment	66,245	-	66,245	124	66,369
41	396.00	Power Operated Equipment	14,045	-	14,045	11	14,056
42	397.00	Communication Equipment	362,501	-	362,501	(10,889)	351,612
43	398.00	Miscellaneous Equipment	88,564	-	88,564	413	88,976
44		**Subtotal General**	2,397,742	-	2,397,742	(38,523)	2,359,219
45							
46							
47							
48		TOTAL WASTEWATER PL	59,511,483	(388,035)	59,123,448	(4,571,142)	54,552,306
49							

Arizona-American Sun City West Wastewater
B-3 Adjustments

Exhibit B-4
Page A3
Witness: Bourassa

Line No.	Account No.	Description	A/D RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted A/D RCN Rebuttal	Ratio	A/D RCN Rebttual	(B-3, page 3b, Adj. #9) A/D Adjustment Adjusted RCN Direct to RCN Rebuttal
1		**Intangible**						
2	301.00	Organization	-	-	-	1.0000	-	-
3	302.00	Franchises	-	-	-	1.0000	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	1.0000	-	-
5		**Subtotal Intangible**	-	-	-		-	-
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	-	-	-	1.0000	-	-
9	311.00	Structures and Improvements	2,596,079	-	2,596,079	1.5467	2,426,955	(169,124)
10	312.00	Preliminary Treatment	878,569	-	878,569	1.5642	869,197	(9,372)
11	313.00	Primary Treatment Equipment	758,232	-	758,232	1.4690	747,267	(10,964)
12	314.00	Secondary Treatment Equipm	3,419,789	-	3,419,789	1.4634	3,381,316	(38,472)
13	315.00	Tertiary Equipment	1,361,956	-	1,361,956	1.2769	1,329,633	(32,323)
14	316.00	Disinfection Equipment	269,346	(382,579)	(113,232)	1.1222	(61,033)	52,199
15	317.00	Effluent Lift Station E	544,857	-	544,857	1.2856	536,272	(8,585)
16	318.00	Outfall Line	124,615	-	124,615	1.8402	125,433	818
17	319.00	Sludge, Treatment & Distributi	688,311	-	688,311	1.3805	680,200	(8,111)
18	321.00	Influent Lift Station	15,370	-	15,370	1.0515	15,218	(153)
19	322.00	General Treatment Equipment	140,779	(68)	140,710	1.0910	136,039	(4,671)
20		**Subtotal Treat & Disc**	10,797,903	(382,647)	10,415,256		10,186,497	(228,758)
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	-	-	-	1.0000	-	-
24	341.00	Structures and Improvements	60,110	-	60,110	1.2533	57,881	(2,228)
25	342.00	Collection System Lift	1,666,445	(327)	1,666,119	1.3633	1,623,694	(42,425)
26	343.00	Collection Mains	4,654,189	-	4,654,189	1.3790	3,942,370	(711,818)
27	344.00	Force Mains	443,024	-	443,024	1.6867	358,755	(84,269)
28	345.00	Discharge Services	1,168,011	-	1,168,011	1.3246	998,845	(169,166)
29	348.00	Manholes	1,559,747	-	1,559,747	1.5160	1,478,432	(81,315)
30		**Subtotal Coll.and Infl.**	9,551,526	(327)	9,551,200		8,459,978	(1,091,222)
31								
32		**General**						**(Common Plant, B-2, Page 7)**
33	389.00	Land and Land Rights	-	-	-	-	-	-
34	390.00	Structures and Improvements	36,415	-	36,415	1.0586	35,923	(492)
35	391.00	Office Funiture and Equipmen	(2,916)	-	(2,916)	1.1092	(2,834)	82
36	391.10	Computer Equipment	(1,259)	-	(1,259)	1.0524	(1,268)	(9)
37	392.00	Transportation Equipment	76,681	-	76,681	1.0705	75,117	(1,564)
38	393.00	Stores Equipment	(286)	-	(286)	1.1550	(281)	5
39	394.00	Tools, Shop and Garage	9,804	-	9,804	1.0958	9,715	(89)
40	395.00	Laboratory Equipment	14,817	-	14,817	1.1766	14,844	28
41	396.00	Power Operated Equipment	1,794	-	1,794	1.0850	1,796	1
42	397.00	Communication Equipment	116,033	-	116,033	1.1029	112,548	(3,485)
43	398.00	Miscellaneous Equipment	32,184	-	32,184	1.2666	32,334	150
44		**Subtotal General**	283,267	-	283,267		277,895	(5,372)
45								
46								
47								
48		TOTAL WASTEWATER PL	20,632,695	(382,973)	20,249,722		18,924,370	(1,325,352)
49								

10/09/2003

Trended RCN
Handy-Whitman

Exhibit
Schedule B-4
Page 1
Witness: Bourassa

Company Code: 4005 Business Area: 4507 Sun City West Wastewater

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T30100	ORGANIZATION		1979	4,078	180.2	72.6	2.4821	10,122	4,078
	T30100	Class Totals		4,078				10,122	4,078
T30200	FRANCH/CONSENTS		1979	50	180.2	72.6	2.4821	124	50
T30200	FRANCH/CONSENTS		1981	18	180.2	91.9	1.9608	35	18
T30200	FRANCH/CONSENTS		1994	1,304	180.2	148.7	1.2118	1,580	1,304
	T30200	Class Totals		1,372				1,739	1,372
T30300	MISC INTANGIBLE PLNT		1997	5,183	180.2	160.6	1.1220	5,815	5,183
	T30300	Class Totals		5,183				5,815	5,183
T31000	LAND/LAND RIGHTS		1982	89,521	180.2	97.4	1.8501	165,622	89,521
T31000	LAND/LAND RIGHTS		1986	253,330	180.2	109.8	1.6412	415,765	253,330
T31000	LAND/LAND RIGHTS		2000	199,467	180.2	173.1	1.0410	207,646	199,467
	T31000	Class Totals		542,318				789,034	542,318
T31100	STRUCT AND IMPROV		1980	1,867,070	350.0	207.0	1.6908	3,156,841	3,156,841
T31100	STRUCT AND IMPROV		1981	4,362	350.0	220.0	1.5909	6,939	6,939
T31100	STRUCT AND IMPROV		1982	27,162	350.0	226.0	1.5487	42,065	42,065
T31100	STRUCT AND IMPROV		1983	39,022	350.0	233.0	1.5021	58,615	58,615

Company Code: 4005 Business Area: 4507 Sun City West Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T31100	STRUCT AND IMPROV	1984	8,693	350.0	238.0	1.4706	12,783	12,783
T31100	STRUCT AND IMPROV	1985	7,102	350.0	241.0	1.4523	10,314	10,314
T31100	STRUCT AND IMPROV	1986	27,540	350.0	246.0	1.4228	39,183	39,183
T31100	STRUCT AND IMPROV	1987	864	350.0	249.0	1.4056	1,215	1,215
T31100	STRUCT AND IMPROV	1988	1,684	350.0	255.0	1.3725	2,312	2,312
T31100	STRUCT AND IMPROV	1989	3,018	350.0	253.0	1.3834	4,176	4,176
T31100	STRUCT AND IMPROV	1989	19,886	350.0	250.0	1.4000	27,840	27,840
T31100	STRUCT AND IMPROV	1990	829	350.0	259.0	1.3514	1,120	1,120
T31100	STRUCT AND IMPROV	1991	750	350.0	260.0	1.3462	1,009	1,009
T31100	STRUCT AND IMPROV	1992	829	350.0	259.0	1.3514	1,121	1,121
T31100	STRUCT AND IMPROV	1992	13,835	350.0	266.0	1.3158	18,204	18,204
T31100	STRUCT AND IMPROV	1993	20,405	350.0	274.0	1.2774	26,065	26,065
T31100	STRUCT AND IMPROV	1994	37,722	350.0	286.0	1.2238	46,165	46,165
T31100	STRUCT AND IMPROV	1994	380,580	350.0	291.0	1.2027	457,723	457,723
T31100	STRUCT AND IMPROV	1995	731	350.0	296.0	1.1824	865	865
T31100	STRUCT AND IMPROV	1995	5,577	350.0	298.0	1.1745	6,550	6,550
T31100	STRUCT AND IMPROV	1996	14,991	350.0	303.0	1.1551	17,316	17,316
T31100	STRUCT AND IMPROV	1996	44,211	350.0	308.0	1.1364	50,242	50,242
T31100	STRUCT AND IMPROV	1997	634	350.0	310.0	1.1290	716	716
T31100	STRUCT AND IMPROV	1997	30,455	350.0	314.0	1.1146	33,945	33,945
T31100	STRUCT AND IMPROV	1998	80,323	350.0	318.0	1.1006	88,403	88,403
T31100	STRUCT AND IMPROV	2000	9,436	350.0	338.0	1.0355	9,771	9,771
T31100	STRUCT AND IMPROV	2001	48,139	350.0	350.0	1.0000	48,139	48,139
	T31100	Class Totals	2,695,859				4,169,651	4,169,651

10/09/2003

Trended RCN
Handy-Whitman

Exhibit
Schedule B-4
Page 3
Witness: Bourassa

Company Code: 4005 Business Area: 4507 Sun City West Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T31200	PRE TREATMENT EQ	1980	597,378	403.0	219.0	1.8402	1,099,295	1,099,295
T31200	PRE TREATMENT EQ	1982	148	403.0	259.0	1.5560	231	231
T31200	PRE TREATMENT EQ	1984	10,397	403.0	279.0	1.4444	15,017	15,017
T31200	PRE TREATMENT EQ	1985	4,494	403.0	282.0	1.4291	6,422	6,422
T31200	PRE TREATMENT EQ	1986	3,629	403.0	287.0	1.4042	5,095	5,095
T31200	PRE TREATMENT EQ	1989	1,262	403.0	301.0	1.3389	1,690	1,690
T31200	PRE TREATMENT EQ	1994	438,280	403.0	334.0	1.2066	528,829	528,829
T31200	PRE TREATMENT EQ	1995	1,065	403.0	337.0	1.1958	1,274	1,274
T31200	PRE TREATMENT EQ	1995	5,781	403.0	335.0	1.2030	6,955	6,955
T31200	PRE TREATMENT EQ	1996	398	403.0	342.0	1.1784	469	469
T31200	PRE TREATMENT EQ	1996	4,093	403.0	347.0	1.1614	4,753	4,753
T31200	PRE TREATMENT EQ	2001	2,014	403.0	403.0	1.0000	2,014	2,014
	T31200	Class Totals	1,068,943				1,672,049	1,672,049
T31300	PRIM. TREATMENT EQ	1980	458,163	403.0	219.0	1.8402	843,111	843,111
T31300	PRIM. TREATMENT EQ	1983	280	403.0	275.0	1.4655	410	410
T31300	PRIM. TREATMENT EQ	1984	528	403.0	279.0	1.4444	762	762
T31300	PRIM. TREATMENT EQ	1988	1,233	403.0	299.0	1.3478	1,662	1,662
T31300	PRIM. TREATMENT EQ	1989	1,752	403.0	301.0	1.3389	2,345	2,345
T31300	PRIM. TREATMENT EQ	1989	1,812	403.0	309.0	1.3042	2,363	2,363
T31300	PRIM. TREATMENT EQ	1990	1,060	403.0	311.0	1.2958	1,373	1,373
T31300	PRIM. TREATMENT EQ	1992	463	403.0	314.0	1.2834	594	594
T31300	PRIM. TREATMENT EQ	1994	538,182	403.0	334.0	1.2066	649,371	649,371
T31300	PRIM. TREATMENT EQ	1995	4,949	403.0	335.0	1.2030	5,954	5,954
T31300	PRIM. TREATMENT EQ	1996	11,514	403.0	347.0	1.1614	13,373	13,373

Company Code: 4005 Business Area: 4507 Sun City West Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T31300	PRIM. TREATMENT EQ	1997	38,508	403.0	352.0	1.1449	44,088	44,088
T31300	PRIM. TREATMENT EQ	1997	8,903	403.0	360.0	1.1194	9,966	9,966
T31300	PRIM. TREATMENT EQ	1998	3,784	403.0	367.0	1.0981	4,156	4,156
T31300	PRIM. TREATMENT EQ	1998	313	403.0	370.0	1.0892	341	341
T31300	PRIM. TREATMENT EQ	2001	12,721	403.0	403.0	1.0000	12,721	12,721
	T31300	Class Totals	1,084,172				1,592,598	1,592,598
T31400	SCND TREAMENT EQ	1980	2,649,803	403.0	219.0	1.8402	4,876,167	4,876,167
T31400	SCND TREAMENT EQ	1981	345	403.0	239.0	1.6862	581	581
T31400	SCND TREAMENT EQ	1983	3,429	403.0	275.0	1.4655	5,025	5,025
T31400	SCND TREAMENT EQ	1984	1,461	403.0	279.0	1.4444	2,110	2,110
T31400	SCND TREAMENT EQ	1985	2,549	403.0	282.0	1.4291	3,642	3,642
T31400	SCND TREAMENT EQ	1986	4,331	403.0	287.0	1.4042	6,081	6,081
T31400	SCND TREAMENT EQ	1987	3,013	403.0	292.0	1.3801	4,158	4,158
T31400	SCND TREAMENT EQ	1988	1,596	403.0	295.0	1.3661	2,181	2,181
T31400	SCND TREAMENT EQ	1988	2,046	403.0	299.0	1.3478	2,758	2,758
T31400	SCND TREAMENT EQ	1989	2,620	403.0	301.0	1.3389	3,509	3,509
T31400	SCND TREAMENT EQ	1989	1,593	403.0	309.0	1.3042	2,077	2,077
T31400	SCND TREAMENT EQ	1990	10,622	403.0	311.0	1.2958	13,764	13,764
T31400	SCND TREAMENT EQ	1990	160	403.0	314.0	1.2834	205	205
T31400	SCND TREAMENT EQ	1991	1,862	403.0	312.0	1.2917	2,405	2,405
T31400	SCND TREAMENT EQ	1991	1,866	403.0	313.0	1.2875	2,402	2,402
T31400	SCND TREAMENT EQ	1992	6,077	403.0	314.0	1.2834	7,799	7,799
T31400	SCND TREAMENT EQ	1992	3,000	403.0	321.0	1.2555	3,766	3,766
T31400	SCND TREAMENT EQ	1993	2,059	403.0	327.0	1.2324	2,538	2,538

Company Code: 4005 Business Area: 4507 Sun City West Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T31400	SCND TREAMENT EQ	1994	1,434,325	403.0	334.0	1.2066	1,730,657	1,730,657
T31400	SCND TREAMENT EQ	1994	15,674	403.0	332.0	1.2139	19,026	19,026
T31400	SCND TREAMENT EQ	1995	3,431	403.0	337.0	1.1958	4,102	4,102
T31400	SCND TREAMENT EQ	1995	23,181	403.0	335.0	1.2030	27,886	27,886
T31400	SCND TREAMENT EQ	1996	94,767	403.0	342.0	1.1784	111,673	111,673
T31400	SCND TREAMENT EQ	1996	1,432	403.0	347.0	1.1614	1,663	1,663
T31400	SCND TREAMENT EQ	1997	46,340	403.0	352.0	1.1449	53,055	53,055
T31400	SCND TREAMENT EQ	1997	14,881	403.0	360.0	1.1194	16,658	16,658
T31400	SCND TREAMENT EQ	1998	42,403	403.0	367.0	1.0981	46,563	46,563
T31400	SCND TREAMENT EQ	1998	16,907	403.0	370.0	1.0892	18,415	18,415
T31400	SCND TREAMENT EQ	1999	429,281	403.0	379.0	1.0633	456,455	456,455
T31400	SCND TREAMENT EQ	2000	817,554	403.0	384.0	1.0495	858,023	858,023
T31400	SCND TREAMENT EQ	2000	44,632	403.0	390.0	1.0333	46,118	46,118
T31400	SCND TREAMENT EQ	2001	31,226	403.0	403.0	1.0000	31,226	31,226
	T31400	Class Totals	5,714,475				8,362,703	8,362,703
T31500	TERTIARY EQ	1978	4,612	403.0	183.0	2.2022	10,156	10,156
T31500	TERTIARY EQ	1979	44,409	403.0	200.0	2.0150	89,484	89,484
T31500	TERTIARY EQ	1980	944,943	403.0	219.0	1.8402	1,738,884	1,738,884
T31500	TERTIARY EQ	1983	5,643	403.0	275.0	1.4655	8,269	8,269
T31500	TERTIARY EQ	1987	322,425	403.0	292.0	1.3801	444,978	444,978
T31500	TERTIARY EQ	1989	7,759	403.0	301.0	1.3389	10,388	10,388
T31500	TERTIARY EQ	1990	1,135	403.0	311.0	1.2958	1,471	1,471
T31500	TERTIARY EQ	1990	3,562	403.0	314.0	1.2834	4,571	4,571
T31500	TERTIARY EQ	1993	549	403.0	327.0	1.2324	676	676

Company Code: 4005 Business Area: 4507 Sun City West Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T31500	TERTIARY EQ	1994	635,860	403.0	334.0	1.2066	767,229	767,229
T31500	TERTIARY EQ	1995	25,101	403.0	335.0	1.2030	30,196	30,196
T31500	TERTIARY EQ	1996	391	403.0	342.0	1.1784	461	461
T31500	TERTIARY EQ	1996	9,339	403.0	347.0	1.1614	10,847	10,847
T31500	TERTIARY EQ	1997	274,869	403.0	352.0	1.1449	314,698	314,698
T31500	TERTIARY EQ	1997	373,888	403.0	360.0	1.1194	418,531	418,531
T31500	TERTIARY EQ	1998	46,554	403.0	367.0	1.0981	51,121	51,121
T31500	TERTIARY EQ	1998	258,050	403.0	370.0	1.0892	281,068	281,068
T31500	TERTIARY EQ	1999	2,668	403.0	376.0	1.0718	2,860	2,860
T31500	TERTIARY EQ	1999	209,358	403.0	379.0	1.0633	222,610	222,610
T31500	TERTIARY EQ	2000	1,576,332	403.0	384.0	1.0495	1,654,360	1,654,360
T31500	TERTIARY EQ	2000	3,737	403.0	390.0	1.0333	3,861	3,861
	T31500	Class Totals	4,751,189				6,066,728	6,066,728
T31600	DISINFECTION EQ	1983	2,078	403.0	275.0	1.4655	3,045	3,045
T31600	DISINFECTION EQ	1984	2,354	403.0	279.0	1.4444	3,400	3,400
T31600	DISINFECTION EQ	1992	1,337	403.0	314.0	1.2834	1,716	1,716
T31600	DISINFECTION EQ	1993	97	403.0	327.0	1.2324	119	119
T31600	DISINFECTION EQ	1994	1,028	403.0	334.0	1.2066	1,241	1,241
T31600	DISINFECTION EQ	1998	4,097	403.0	367.0	1.0981	4,499	4,499
T31600	DISINFECTION EQ	2000	20,222	403.0	384.0	1.0495	21,223	21,223
T31600	DISINFECTION EQ	2001	1,772	403.0	403.0	1.0000	1,772	1,772
	T31600	Class Totals	32,987				37,018	37,018

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T31700	EFFLUENT STATION	1980	288,574	403.0	219.0	1.8402	531,033	531,033
T31700	EFFLUENT STATION	1985	377	403.0	282.0	1.4291	538	538
T31700	EFFLUENT STATION	1986	10,128	403.0	287.0	1.4042	14,221	14,221
T31700	EFFLUENT STATION	1988	231	403.0	295.0	1.3661	315	315
T31700	EFFLUENT STATION	1989	639	403.0	301.0	1.3389	855	855
T31700	EFFLUENT STATION	1990	154	403.0	311.0	1.2958	199	199
T31700	EFFLUENT STATION	1992	907	403.0	314.0	1.2834	1,164	1,164
T31700	EFFLUENT STATION	1994	1,162	403.0	334.0	1.2066	1,402	1,402
T31700	EFFLUENT STATION	1995	182	403.0	337.0	1.1958	218	218
T31700	EFFLUENT STATION	1995	12,418	403.0	335.0	1.2030	14,939	14,939
T31700	EFFLUENT STATION	1996	710	403.0	342.0	1.1784	837	837
T31700	EFFLUENT STATION	1996	10,881	403.0	347.0	1.1614	12,637	12,637
T31700	EFFLUENT STATION	1997	4,537	403.0	352.0	1.1449	5,194	5,194
T31700	EFFLUENT STATION	1997	11,226	403.0	360.0	1.1194	12,566	12,566
T31700	EFFLUENT STATION	1999	1,027	403.0	379.0	1.0633	1,092	1,092
T31700	EFFLUENT STATION	2000	661,184	403.0	384.0	1.0495	693,913	693,913
	T31700	Class Totals	1,004,341				1,291,132	1,291,132
T31800	OUTFALL LINE	1980	94,680	403.0	219.0	1.8402	174,230	174,230
	T31800	Class Totals	94,680				174,230	174,230
T31900	SLUDGE, TRMNT & DIS	1980	493,280	403.0	219.0	1.8402	907,734	907,734
T31900	SLUDGE, TRMNT & DIS	1981	50	403.0	239.0	1.6862	84	84
T31900	SLUDGE, TRMNT & DIS	1982	4,120	403.0	259.0	1.5560	6,410	6,410

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T31900	SLUDGE, TRMNT & DIS	1983	1,597	403.0	275.0	1.4655	2,340	2,340
T31900	SLUDGE, TRMNT & DIS	1984	22	403.0	279.0	1.4444	31	31
T31900	SLUDGE, TRMNT & DIS	1985	758	403.0	282.0	1.4291	1,083	1,083
T31900	SLUDGE, TRMNT & DIS	1986	8,331	403.0	287.0	1.4042	11,698	11,698
T31900	SLUDGE, TRMNT & DIS	1994	141,668	403.0	334.0	1.2066	170,937	170,937
T31900	SLUDGE, TRMNT & DIS	1995	1,256	403.0	335.0	1.2030	1,511	1,511
T31900	SLUDGE, TRMNT & DIS	1996	160	403.0	342.0	1.1784	188	188
T31900	SLUDGE, TRMNT & DIS	1996	191,714	403.0	347.0	1.1614	222,656	222,656
T31900	SLUDGE, TRMNT & DIS	1997	412	403.0	360.0	1.1194	462	462
T31900	SLUDGE, TRMNT & DIS	1998	50,064	403.0	367.0	1.0981	54,975	54,975
T31900	SLUDGE, TRMNT & DIS	1998	106	403.0	370.0	1.0892	115	115
T31900	SLUDGE, TRMNT & DIS	1999	12,177	403.0	379.0	1.0633	12,948	12,948
T31900	SLUDGE, TRMNT & DIS	2000	431,585	403.0	384.0	1.0495	452,948	452,948
	T31900	Class Totals	1,337,304				1,846,128	1,846,128
T32100	INFLUENT LIFT STATIO	1986	5,609	403.0	287.0	1.4042	7,876	7,876
T32100	INFLUENT LIFT STATIO	1994	5,457	403.0	334.0	1.2066	6,585	6,585
T32100	INFLUENT LIFT STATIO	1994	2,086	403.0	332.0	1.2139	2,532	2,532
T32100	INFLUENT LIFT STATIO	1995	371	403.0	337.0	1.1958	443	443
T32100	INFLUENT LIFT STATIO	1995	2,355	403.0	335.0	1.2030	2,833	2,833
T32100	INFLUENT LIFT STATIO	1996	941	403.0	342.0	1.1784	1,110	1,110
T32100	INFLUENT LIFT STATIO	1996	570	403.0	347.0	1.1614	662	662
T32100	INFLUENT LIFT STATIO	1998	263	403.0	370.0	1.0892	287	287
T32100	INFLUENT LIFT STATIO	2000	1,101	403.0	390.0	1.0333	1,138	1,138
T32100	INFLUENT LIFT STATIO	2001	72,789	403.0	403.0	1.0000	72,789	72,789

	T32100	Class Totals	91,546				96,258	96,258
T32200	GNL TRMNT EQ	1985	152	403.0	282.0	1.4291	217	217
T32200	GNL TRMNT EQ	1991	1,398	403.0	312.0	1.2917	1,805	1,805
T32200	GNL TRMNT EQ	1992	703	403.0	314.0	1.2834	902	902
T32200	GNL TRMNT EQ	1994	209,771	403.0	334.0	1.2066	253,110	253,110
T32200	GNL TRMNT EQ	1994	5,550	403.0	332.0	1.2139	6,737	6,737
T32200	GNL TRMNT EQ	1995	558	403.0	337.0	1.1958	668	668
T32200	GNL TRMNT EQ	1996	872	403.0	342.0	1.1784	1,028	1,028
T32200	GNL TRMNT EQ	1997	24,965	403.0	360.0	1.1194	27,946	27,946
T32200	GNL TRMNT EQ	1998	18,384	403.0	367.0	1.0981	20,187	20,187
T32200	GNL TRMNT EQ	1998	552	403.0	370.0	1.0892	601	601
T32200	GNL TRMNT EQ	2000	636,164	403.0	384.0	1.0495	667,655	667,655
	T32200	Class Totals	899,073				980,860	980,860
T34000	LAND/LAND RIGHTS	1982	2,835	180.2	97.4	1.8501	5,245	2,835
T34000	LAND/LAND RIGHTS	1983	17,912	180.2	99.0	1.8202	32,603	17,912
	T34000	Class Totals	20,747				37,848	20,747
T34100	STRUCT AND IMPROV	1981	14,878	350.0	220.0	1.5909	23,669	23,669
T34100	STRUCT AND IMPROV	1983	33,438	350.0	233.0	1.5021	50,227	50,227
T34100	STRUCT AND IMPROV	1984	554	350.0	238.0	1.4706	814	814
T34100	STRUCT AND IMPROV	1994	233,812	350.0	291.0	1.2027	281,206	281,206
T34100	STRUCT AND IMPROV	1996	16,678	350.0	303.0	1.1551	19,265	19,265

	T34100	Class Totals	299,361				375,182	375,182
T34200	COLL. SYSTEM LIFT	1981	490,796	403.0	239.0	1.6862	827,580	827,580
T34200	COLL. SYSTEM LIFT	1982	5,707	403.0	259.0	1.5560	8,880	8,880
T34200	COLL. SYSTEM LIFT	1983	2,982	403.0	275.0	1.4655	4,370	4,370
T34200	COLL. SYSTEM LIFT	1984	1,467	403.0	279.0	1.4444	2,118	2,118
T34200	COLL. SYSTEM LIFT	1987	1,389	403.0	292.0	1.3801	1,916	1,916
T34200	COLL. SYSTEM LIFT	1988	1,570	403.0	295.0	1.3661	2,145	2,145
T34200	COLL. SYSTEM LIFT	1989	1,858	403.0	301.0	1.3389	2,488	2,488
T34200	COLL. SYSTEM LIFT	1989	5,361	403.0	309.0	1.3042	6,991	6,991
T34200	COLL. SYSTEM LIFT	1990	52,448	403.0	311.0	1.2958	67,962	67,962
T34200	COLL. SYSTEM LIFT	1990	9,024	403.0	314.0	1.2834	11,581	11,581
T34200	COLL. SYSTEM LIFT	1991	6,091	403.0	312.0	1.2917	7,867	7,867
T34200	COLL. SYSTEM LIFT	1992	38,547	403.0	314.0	1.2834	49,471	49,471
T34200	COLL. SYSTEM LIFT	1993	2,065	403.0	327.0	1.2324	2,544	2,544
T34200	COLL. SYSTEM LIFT	1993	5,819	403.0	331.0	1.2175	7,084	7,084
T34200	COLL. SYSTEM LIFT	1994	879	403.0	334.0	1.2066	1,061	1,061
T34200	COLL. SYSTEM LIFT	1994	19,463	403.0	332.0	1.2139	23,626	23,626
T34200	COLL. SYSTEM LIFT	1995	328	403.0	337.0	1.1958	393	393
T34200	COLL. SYSTEM LIFT	1995	8,929	403.0	335.0	1.2030	10,742	10,742
T34200	COLL. SYSTEM LIFT	1996	557,165	403.0	342.0	1.1784	656,563	656,563
T34200	COLL. SYSTEM LIFT	1996	3,069	403.0	347.0	1.1614	3,565	3,565
T34200	COLL. SYSTEM LIFT	1998	51,394	403.0	367.0	1.0981	56,436	56,436
T34200	COLL. SYSTEM LIFT	1999	89	403.0	379.0	1.0633	95	95
T34200	COLL. SYSTEM LIFT	2000	41,314	403.0	384.0	1.0495	43,359	43,359
T34200	COLL. SYSTEM LIFT	2000	44,252	403.0	390.0	1.0333	45,725	45,725
T34200	COLL. SYSTEM LIFT	2001	3,772	403.0	403.0	1.0000	3,772	3,772

	T34200	Class Totals	1,355,787				1,848,348	1,848,348
T34300	COLL. MAINS	1978	1,775,955	324.0	179.0	1.8101	3,214,657	3,214,657
T34300	COLL. MAINS	1979	932,041	324.0	193.0	1.6788	1,564,710	1,564,710
T34300	COLL. MAINS	1980	255,146	324.0	209.0	1.5502	395,527	395,527
T34300	COLL. MAINS	1981	360,593	324.0	224.0	1.4464	521,561	521,561
T34300	COLL. MAINS	1982	224,666	324.0	239.0	1.3556	304,557	304,557
T34300	COLL. MAINS	1983	38,488	324.0	246.0	1.3171	50,692	50,692
T34300	COLL. MAINS	1984	504,979	324.0	244.0	1.3279	670,561	670,561
T34300	COLL. MAINS	1985	370,796	324.0	248.0	1.3065	484,444	484,444
T34300	COLL. MAINS	1986	462,555	324.0	245.0	1.3224	611,682	611,682
T34300	COLL. MAINS	1987	767,732	324.0	252.0	1.2857	987,073	987,073
T34300	COLL. MAINS	1988	66,397	324.0	255.0	1.2706	84,364	84,364
T34300	COLL. MAINS	1988	559	324.0	264.0	1.2273	686	686
T34300	COLL. MAINS	1989	205,553	324.0	269.0	1.2045	247,589	247,589
T34300	COLL. MAINS	1989	276,453	324.0	273.0	1.1868	328,094	328,094
T34300	COLL. MAINS	1990	143,048	324.0	273.0	1.1868	169,770	169,770
T34300	COLL. MAINS	1990	57,300	324.0	275.0	1.1782	67,511	67,511
T34300	COLL. MAINS	1991	4,018	324.0	277.0	1.1697	4,699	4,699
T34300	COLL. MAINS	1991	218,449	324.0	279.0	1.1613	253,684	253,684
T34300	COLL. MAINS	1992	355,642	324.0	277.0	1.1697	415,995	415,995
T34300	COLL. MAINS	1993	982,519	324.0	281.0	1.1530	1,132,844	1,132,844
T34300	COLL. MAINS	1993	95,231	324.0	285.0	1.1368	108,258	108,258
T34300	COLL. MAINS	1994	9	324.0	291.0	1.1134	10	10
T34300	COLL. MAINS	1994	815,219	324.0	289.0	1.1211	913,942	913,942
T34300	COLL. MAINS	1995	18,356	324.0	291.0	1.1134	20,438	20,438
T34300	COLL. MAINS	1995	350,305	324.0	286.0	1.1329	396,860	396,860
T34300	COLL. MAINS	1996	221,581	324.0	289.0	1.1211	248,414	248,414

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34300	COLL. MAINS		1996	12,971	324.0	292.0	1.1096	14,392	14,392
T34300	COLL. MAINS		1997	8,508	324.0	297.0	1.0909	9,281	9,281
T34300	COLL. MAINS		1997	30,945	324.0	299.0	1.0836	33,532	33,532
T34300	COLL. MAINS		1998	23,927	324.0	300.0	1.0800	25,842	25,842
T34300	COLL. MAINS		1999	13,878	324.0	306.0	1.0588	14,694	14,694
T34300	COLL. MAINS		2000	121,567	324.0	308.0	1.0519	127,876	127,876
T34300	COLL. MAINS		2000	28,285	324.0	316.0	1.0253	29,001	29,001
T34300	COLL. MAINS		2001	44,571	324.0	324.0	1.0000	44,571	44,571
		T34300	Class Totals	9,788,254				13,497,831	13,497,831
T34400	FORCE MAINS		1978	474,417	324.0	179.0	1.8101	858,742	858,742
T34400	FORCE MAINS		1979	50,781	324.0	193.0	1.6788	85,251	85,251
T34400	FORCE MAINS		1980	4,714	324.0	209.0	1.5502	7,307	7,307
T34400	FORCE MAINS		1981	183,348	324.0	224.0	1.4464	265,194	265,194
T34400	FORCE MAINS		1982	32,722	324.0	239.0	1.3556	44,357	44,357
T34400	FORCE MAINS		1983	6,883	324.0	246.0	1.3171	9,065	9,065
T34400	FORCE MAINS		1986	74	324.0	245.0	1.3224	97	97
		T34400	Class Totals	752,939				1,270,016	1,270,016
T34500	DISCHARGE SERVICES		1978	239,970	324.0	179.0	1.8101	434,369	434,369
T34500	DISCHARGE SERVICES		1979	224,601	324.0	193.0	1.6788	377,060	377,060
T34500	DISCHARGE SERVICES		1980	43,743	324.0	209.0	1.5502	67,810	67,810
T34500	DISCHARGE SERVICES		1981	168,933	324.0	224.0	1.4464	244,344	244,344
T34500	DISCHARGE SERVICES		1982	45,856	324.0	239.0	1.3556	62,162	62,162

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34500	DISCHARGE SERVICES		1983	9,146	324.0	246.0	1.3171	12,046	12,046
T34500	DISCHARGE SERVICES		1984	197,866	324.0	244.0	1.3279	262,746	262,746
T34500	DISCHARGE SERVICES		1985	128,835	324.0	248.0	1.3065	168,322	168,322
T34500	DISCHARGE SERVICES		1986	110,531	324.0	245.0	1.3224	146,166	146,166
T34500	DISCHARGE SERVICES		1987	242,278	324.0	252.0	1.2857	311,496	311,496
T34500	DISCHARGE SERVICES		1988	27,736	324.0	255.0	1.2706	35,241	35,241
T34500	DISCHARGE SERVICES		1989	52,506	324.0	269.0	1.2045	63,244	63,244
T34500	DISCHARGE SERVICES		1989	115,022	324.0	273.0	1.1868	136,508	136,508
T34500	DISCHARGE SERVICES		1990	48,966	324.0	273.0	1.1868	58,112	58,112
T34500	DISCHARGE SERVICES		1990	39,659	324.0	275.0	1.1782	46,726	46,726
T34500	DISCHARGE SERVICES		1991	75,978	324.0	279.0	1.1613	88,234	88,234
T34500	DISCHARGE SERVICES		1992	109,366	324.0	277.0	1.1697	127,925	127,925
T34500	DISCHARGE SERVICES		1993	88,291	324.0	281.0	1.1530	101,800	101,800
T34500	DISCHARGE SERVICES		1993	25,999	324.0	285.0	1.1368	29,556	29,556
T34500	DISCHARGE SERVICES		1994	369,945	324.0	289.0	1.1211	414,745	414,745
T34500	DISCHARGE SERVICES		1995	15,613	324.0	291.0	1.1134	17,384	17,384
T34500	DISCHARGE SERVICES		1995	164,226	324.0	286.0	1.1329	186,052	186,052
T34500	DISCHARGE SERVICES		1996	90,608	324.0	289.0	1.1211	101,580	101,580
T34500	DISCHARGE SERVICES		1996	702	324.0	292.0	1.1096	779	779
T34500	DISCHARGE SERVICES		1997	3,612	324.0	299.0	1.0836	3,914	3,914
T34500	DISCHARGE SERVICES		1999	1,400	324.0	306.0	1.0588	1,482	1,482
T34500	DISCHARGE SERVICES		2000	3,766	324.0	316.0	1.0253	3,861	3,861
		T34500	Class Totals	2,645,160				3,503,676	3,503,676
T34800	MANHOLES		1978	327,739	350.0	164.0	2.1341	699,427	699,427

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34800	MANHOLES	1979	339,268	350.0	182.0	1.9231	652,446	652,446
T34800	MANHOLES	1980	119,026	350.0	207.0	1.6908	201,249	201,249
T34800	MANHOLES	1981	118,157	350.0	220.0	1.5909	187,975	187,975
T34800	MANHOLES	1982	124,465	350.0	226.0	1.5487	192,758	192,758
T34800	MANHOLES	1983	36,609	350.0	233.0	1.5021	54,990	54,990
T34800	MANHOLES	1984	268,764	350.0	238.0	1.4706	395,244	395,244
T34800	MANHOLES	1985	244,615	350.0	241.0	1.4523	355,254	355,254
T34800	MANHOLES	1986	170,296	350.0	246.0	1.4228	242,297	242,297
T34800	MANHOLES	1987	261,836	350.0	249.0	1.4056	368,037	368,037
T34800	MANHOLES	1988	31,869	350.0	249.0	1.4056	44,796	44,796
T34800	MANHOLES	1989	88,331	350.0	253.0	1.3834	122,197	122,197
T34800	MANHOLES	1989	116,363	350.0	250.0	1.4000	162,908	162,908
T34800	MANHOLES	1990	49,943	350.0	259.0	1.3514	67,492	67,492
T34800	MANHOLES	1990	19,337	350.0	262.0	1.3359	25,832	25,832
T34800	MANHOLES	1991	1,124	350.0	260.0	1.3462	1,514	1,514
T34800	MANHOLES	1991	48,010	350.0	262.0	1.3359	64,137	64,137
T34800	MANHOLES	1992	87,518	350.0	266.0	1.3158	115,157	115,157
T34800	MANHOLES	1993	146,680	350.0	274.0	1.2774	187,369	187,369
T34800	MANHOLES	1993	23,014	350.0	277.0	1.2635	29,078	29,078
T34800	MANHOLES	1994	213,185	350.0	291.0	1.2027	256,398	256,398
T34800	MANHOLES	1995	30,243	350.0	296.0	1.1824	35,759	35,759
T34800	MANHOLES	1995	169,490	350.0	298.0	1.1745	199,066	199,066
T34800	MANHOLES	1996	102,600	350.0	303.0	1.1551	118,514	118,514
T34800	MANHOLES	1996	1,725	350.0	308.0	1.1364	1,961	1,961
T34800	MANHOLES	1997	15,476	350.0	314.0	1.1146	17,250	17,250
T34800	MANHOLES	1998	8,274	350.0	318.0	1.1006	9,106	9,106
T34800	MANHOLES	1999	10,000	350.0	324.0	1.0802	10,802	10,802

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T34800	MANHOLES		2000	15,397	350.0	338.0	1.0355	15,944	15,944
		T34800	Class Totals	3,189,365				4,834,972	4,834,972
T39000	STRUCT AND IMPROV		1999	250,321	350.0	324.0	1.0802	270,397	270,397
T39000	STRUCT AND IMPROV		2000	588,130	350.0	329.0	1.0638	625,653	625,653
T39000	STRUCT AND IMPROV		2000	351,359	350.0	338.0	1.0355	363,832	363,832
T39000	STRUCT AND IMPROV		2001	6,303	350.0	350.0	1.0000	6,303	6,303
		T39000	Class Totals	1,196,115				1,266,187	1,266,187
T39100	OFFICE FURN/EQUIP		1988	1,022	180.2	117.7	1.5310	1,565	1,565
T39100	OFFICE FURN/EQUIP		1989	648	180.2	123.3	1.4615	947	947
T39100	OFFICE FURN/EQUIP		1994	290	180.2	148.7	1.2118	351	351
T39100	OFFICE FURN/EQUIP		1995	500	180.2	152.2	1.1840	592	592
T39100	OFFICE FURN/EQUIP		1996	553	180.2	156.6	1.1507	637	637
T39100	OFFICE FURN/EQUIP		1997	18,036	180.2	160.6	1.1220	20,237	20,237
T39100	OFFICE FURN/EQUIP		1998	119,939	180.2	163.6	1.1015	132,112	132,112
T39100	OFFICE FURN/EQUIP		1999	1,723	180.2	167.8	1.0739	1,850	1,850
		T39100	Class Totals	142,713				158,294	158,294
T39110	COMPUTER EQUIPMENT		1988	790	180.2	117.7	1.5310	1,209	1,209
T39110	COMPUTER EQUIPMENT		2000	33,277	180.2	173.1	1.0410	34,641	34,641

	T39110	Class Totals	34,067				35,851	35,851
T39200	TRANSPORT EQUIP	1992	54,689	180.2	141.0	1.2780	69,892	69,892
T39200	TRANSPORT EQUIP	1995	831	180.2	152.2	1.1840	984	984
T39200	TRANSPORT EQUIP	2000	29,327	180.2	173.1	1.0410	30,530	30,530
T39200	TRANSPORT EQUIP	2001	149,903	180.2	180.2	1.0000	149,903	149,903
	T39200	Class Totals	234,751				251,310	251,310
T39300	STORES EQUIPMENT	1982	60	180.2	97.4	1.8501	111	111
T39300	STORES EQUIPMENT	1984	198	180.2	103.6	1.7394	344	344
T39300	STORES EQUIPMENT	1993	623	180.2	145.5	1.2385	771	771
T39300	STORES EQUIPMENT	1995	55	180.2	152.2	1.1840	66	66
T39300	STORES EQUIPMENT	1996	4,522	180.2	156.6	1.1507	5,204	5,204
T39300	STORES EQUIPMENT	1997	3,633	180.2	160.6	1.1220	4,076	4,076
T39300	STORES EQUIPMENT	1997	2,176	180.2	160.6	1.1220	2,442	2,442
	T39300	Class Totals	11,269				13,016	13,016
T39400	TLS/SHOP/GAR EQUIP	1981	381	180.2	91.9	1.9608	747	747
T39400	TLS/SHOP/GAR EQUIP	1983	101	180.2	99.0	1.8202	183	183
T39400	TLS/SHOP/GAR EQUIP	1987	3,414	180.2	113.2	1.5919	5,435	5,435
T39400	TLS/SHOP/GAR EQUIP	1988	1,312	180.2	117.7	1.5310	2,009	2,009
T39400	TLS/SHOP/GAR EQUIP	1990	272	180.2	129.4	1.3926	378	378
T39400	TLS/SHOP/GAR EQUIP	1992	2,971	180.2	141.0	1.2780	3,797	3,797
T39400	TLS/SHOP/GAR EQUIP	1992	1,440	180.2	141.0	1.2780	1,840	1,840
T39400	TLS/SHOP/GAR EQUIP	1993	2,794	180.2	145.5	1.2385	3,461	3,461

Company Code: 4005 Business Area: 4507 Sun City West Wastewater

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T39400	TLS/SHOP/GAR EQUIP	1994	1,315	180.2	148.7	1.2118	1,594	1,594
T39400	TLS/SHOP/GAR EQUIP	1995	11	180.2	152.2	1.1840	13	13
T39400	TLS/SHOP/GAR EQUIP	1995	4,195	180.2	152.2	1.1840	4,967	4,967
T39400	TLS/SHOP/GAR EQUIP	1996	2,730	180.2	156.6	1.1507	3,142	3,142
T39400	TLS/SHOP/GAR EQUIP	1996	966	180.2	156.6	1.1507	1,111	1,111
T39400	TLS/SHOP/GAR EQUIP	1997	4,698	180.2	160.6	1.1220	5,271	5,271
T39400	TLS/SHOP/GAR EQUIP	1997	8,830	180.2	160.6	1.1220	9,907	9,907
T39400	TLS/SHOP/GAR EQUIP	1998	5,912	180.2	163.6	1.1015	6,512	6,512
T39400	TLS/SHOP/GAR EQUIP	1999	12,235	180.2	167.8	1.0739	13,140	13,140
T39400	TLS/SHOP/GAR EQUIP	2001	50,032	180.2	180.2	1.0000	50,032	50,032
	T39400	Class Totals	103,615				113,546	113,546
T39500	LAB EQUIP	1980	3,253	180.2	83.3	2.1633	7,037	7,037
T39500	LAB EQUIP	1986	597	180.2	109.8	1.6412	979	979
T39500	LAB EQUIP	1988	464	180.2	117.7	1.5310	711	711
T39500	LAB EQUIP	1991	527	180.2	136.2	1.3231	697	697
T39500	LAB EQUIP	1992	409	180.2	141.0	1.2780	522	522
T39500	LAB EQUIP	1993	108	180.2	145.5	1.2385	133	133
T39500	LAB EQUIP	1994	953	180.2	148.7	1.2118	1,155	1,155
T39500	LAB EQUIP	1995	26	180.2	152.2	1.1840	30	30
T39500	LAB EQUIP	1995	1,411	180.2	152.2	1.1840	1,670	1,670
T39500	LAB EQUIP	1996	15,249	180.2	156.6	1.1507	17,547	17,547
T39500	LAB EQUIP	1997	10,552	180.2	160.6	1.1220	11,839	11,839
T39500	LAB EQUIP	1999	14,475	180.2	167.8	1.0739	15,545	15,545
T39500	LAB EQUIP	2000	2,827	180.2	173.1	1.0410	2,943	2,943

Company Code: 4005 Business Area: 4507 Sun City West Wastewater

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T39500	LAB EQUIP		2001	5,553	180.2	180.2	1.0000	5,553	5,553
		T39500	Class Totals	56,407				66,368	66,368
T39600	PWR OPER EQUIP		1995	3,984	180.2	152.2	1.1840	4,717	4,717
T39600	PWR OPER EQUIP		2000	8,970	180.2	173.1	1.0410	9,338	9,338
		T39600	Class Totals	12,954				14,055	14,055
T39700	COMM EQUIP		1981	265	180.2	91.9	1.9608	519	519
T39700	COMM EQUIP		1992	50	180.2	141.0	1.2780	64	64
T39700	COMM EQUIP		1994	779	180.2	148.7	1.2118	944	944
T39700	COMM EQUIP		1997	6,031	180.2	160.6	1.1220	6,767	6,767
T39700	COMM EQUIP		1998	311,680	180.2	163.6	1.1015	343,316	343,316
		T39700	Class Totals	318,806				351,612	351,612
T39800	MISC EQUIP		1980	3,685	180.2	83.3	2.1633	7,971	7,971
T39800	MISC EQUIP		1981	752	180.2	91.9	1.9608	1,474	1,474
T39800	MISC EQUIP		1982	353	180.2	97.4	1.8501	653	653
T39800	MISC EQUIP		1983	263	180.2	99.0	1.8202	478	478
T39800	MISC EQUIP		1984	80	180.2	103.6	1.7394	139	139
T39800	MISC EQUIP		1986	1,824	180.2	109.8	1.6412	2,993	2,993
T39800	MISC EQUIP		1987	1,329	180.2	113.2	1.5919	2,117	2,117
T39800	MISC EQUIP		1988	2,509	180.2	117.7	1.5310	3,842	3,842

Company Code: 4005 Business Area: 4507 Sun City West Wastewater

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T39800	MISC EQUIP		1989	270	180.2	123.3	1.4615	394	394
T39800	MISC EQUIP		1990	459	180.2	129.4	1.3926	639	639
T39800	MISC EQUIP		1991	12,748	180.2	136.2	1.3231	16,866	16,866
T39800	MISC EQUIP		1992	557	180.2	141.0	1.2780	712	712
T39800	MISC EQUIP		1993	1,863	180.2	145.5	1.2385	2,307	2,307
T39800	MISC EQUIP		1994	92	180.2	148.7	1.2118	112	112
T39800	MISC EQUIP		1997	19,429	180.2	160.6	1.1220	21,799	21,799
T39800	MISC EQUIP		1998	24,033	180.2	163.6	1.1015	26,472	26,472
		T39800	Class Totals	70,250				88,976	88,976
Company Code:	4005	Business Area:	4507	39,560,092				54,823,166	54,552,306

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 1
Witness: Bourassa

Line No.		Direct Test Year Adjusted Results	Label	Adjustment	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	**Revenues**						
2	Flat Rate Revenues	$ 3,534,678			$ 3,534,678	1,608,856	$ 5,143,534
3		-			-		-
4	Other Wastewater Revenues	1,002			1,002		1,002
5		$ 3,535,680		$ -	$ 3,535,680	$ 1,608,856	$ 5,144,536
6	**Operating Expenses**						
7	Salaries and Wages	$ 607,304	1/6	(108,514)	$ 498,790		$ 498,790
8	Purchased Wastewater Treatment	-			-		-
9	Purchased Power	1,426			1,426		1,426
10	Fuel for Power Production	-			-		-
11	Chemicals	375,064			375,064		375,064
12	Materials ans Supplies	392,206			392,206		392,206
13	Repairs and Maintenance	-			-		-
14	Office Supplies and Expense	136,282	7	(36,639)	99,644		99,644
15	Outside Services	(14,005)			(14,005)		(14,005)
16	Service Company Charges	552,478	10	(18,465)	534,013		534,013
17	Water Testing	-			-		-
18	Rents	91,410			91,410		91,410
19	Transportation Expenses	-			-		-
20	Insurance - General Liability	24,187	8	(2,304)	21,883		21,883
21	Insurance - Health and Life	-			-		-
22	Regulatory Commission Expense - Rate Case	23,335			23,335		23,335
23	Miscellaneous Expense	243,134	9	290	243,425		243,425
24	Depreciation Expense	1,432,265	3	(22,125)	1,410,140		1,410,140
25	Taxes Other Than Income	36,253	2	(3,159)	33,094		33,094
26	Property Taxes	168,501	4	(4,775)	163,726		163,726
27	Income Tax	(369,763)		101,564	(268,199)		352,801
28					-		-
29	**Total Operating Expenses**	$ 3,700,079		$ (94,128)	$ 3,605,951	$ -	$ 4,226,952
30	**Operating Income**	$ (164,399)		$ 94,128	$ (70,271)	$ 1,608,856	$ 917,584
31	**Other Income (Expense)**						
32	Interest Income	-			-		-
33	Other income	-			-		-
34	Interest Expense	(423,801)	5	67,435	(356,367)		(356,367)
35	Other Expense	-			-		-
36	Gain/Loss Sale of Fixed Assets	-			-		-
37	**Total Other Income (Expense)**	$ (423,801)		$ 67,435	$ (356,367)	$ -	$ (356,367)
38	**Net Profit (Loss)**	$ (588,200)		$ 161,562	$ (426,638)	$ 1,608,856	$ 561,218
39							
40	SUPPORTING SCHEDULES:					RECAP SCHEDULES:	
41	Rebuttal C-2					Rebuttal A-1	
42							
43							

Arizona American
Summary of Rebuttal Adjustments
Test Year December 31, 2001

Exhibit
Rebuttal Schedule C-2
Witness: Bourassa
Page1

	Water/ Sewer Label	Description	Sun City West Wastewater
Revenues			
Revenues		None	
Other Revenues		None	
			$ -
Operating Expenses			
Salaries and Wages	1	Adjust to Actual 2002 Wages	$ (31,414)
	6	Adjust to Actual 2002 Additional (Corporate)	(77,099)
Purchased Water	11	Adjust to annualized 2001 qty ordered	
Purchased Wastewater Treatment		None	
Purchased Power		None	
Fuel for Power Production			
Chemicals		None	
Materials ans Supplies		None	
Repairs and Maintenance		None	
Office Supplies and Expense	7	Adjust to Actual 2002 Additional (Corporate)	(36,639)
Outside Services			
Service Company Charges	10	Adjust to Actual 2002 Service Company Charges	(18,465)
Water Testing		None	
Rents		None	
Transportation Expenses			
Insurance - General Liability	8	Adjust to Actual 2002 Additional (Corporate)	(2,304)
Insurance - Health and Life		None	
Rate Case Expense		None	
Miscellaneous Expense	9	Adjust to Actual 2002 Additional (Corporate)	290
Depreciation Expense	3	Depreciation Expense	(22,125)
Taxes Other Than Income	2	Adjust to 2002 PR Tax based on Actual Wages	(3,159)
Property Taxes	4	Property Taxes	(4,775)
Income Tax			101,564
Tolleson Wastewater User Fees		None	
Total Operating Expenses			$ (94,128)
Operating Income			$ 94,128

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line No.			Amount
1	Projected Salaries & Wages and Related Expenses		
2			
3	Actual 2002 Wages and Salaries		
4	601	Salaries & Wages	$ 413,655
5			
6	Direct Filing Proposed Wages and Salaries		
7	601	Salaries & Wages	445,070
8			
9	Increase (Decrease)		$ (31,414)
10			
11	Adjustment to Revenues and/or Expenses		$ (31,414)
12			
13			
14			
15			

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line No.			Amount
1	Projected Salaries & Wages and Related Expenses		
2			
3	PR Taxes Based on Actual 2002 Wages and Salaries		
4	408	Taxes Other Than Income	33,094
5			
6	Direct Filing Proposed PR Taxes		
7	408	Taxes Other Than Income	36,253
8			
9	Increase (Decrease)		$ (3,159)
10			
11	Adjustment to Revenues and/or Expenses		$ (3,159)
12			
13			
14			
15			

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Depreciation Expense

Line No.	Account No.	Description	Rebuttak Original Cost	Rate	Depreciation Expense
		Intangible			
6	301.00	Organization	$ 4,078	0.00%	$ -
7	302.00	Franchises	1,372	0.00%	-
8	303.00	Miscellaneous Intangibles	5,184	0.00%	-
9		**Subtotal Intangible**	$ 10,634		$ -
10					
11		**Treatment & Discharge**			
12	310.00	Land and Land Rights	$ 542,319	0.00%	$ -
13	311.00	Structures and Improvements	2,717,997	5.00%	135,900
14	312.00	Preliminary Treatment	1,068,943	5.00%	53,447
15	313.00	Primary Treatment Equipment	1,084,172	5.00%	54,209
16	314.00	Secondary Treatment Equipment	5,714,476	5.00%	285,724
17	315.00	Tertiary Equipment	6,087,981	5.00%	304,399
18	316.00	Disinfection Equipment	32,988	5.00%	1,649
19	317.00	Effluent Lift Station E	1,004,341	8.40%	84,365
20	318.00	Outfall Line	113,141	5.00%	5,657
21	319.00	Sludge, Treatment & Distribution	-	5.00%	-
22	321.00	Influent Lift Station	91,546	8.40%	7,690
23	322.00	General Treatment Equipment	899,073	5.00%	44,954
24		**Subtotal Treatment & Discharge**	$ 19,356,976		$ 977,993
25					
26		**Collection and Influent**			
27	340.00	Land and Land Rights	$ 20,747	0.00%	$ -
28	341.00	Structures and Improvements	-	1.67%	-
29	342.00	Collection System Lift	1,355,787	8.40%	113,886
30	343.00	Collection Mains	12,977,675	2.04%	264,745
31	344.00	Force Mains	752,939	2.07%	15,586
32	345.00	Discharge Services	2,645,161	2.04%	53,961
33	348.00	Manholes	0	2.03%	0
34		**Subtotal Collection and Influent**	$ 17,752,309		$ 448,178
35					
36		**General**			
37	389.00	Land and Land Rights	$ 780	0.00%	$ -
38	390.00	Structures and Improvements	834,864	1.68%	14,032
39	391.00	Office Funiture and Equipment	297,756	4.55%	13,534
40	391.10	Computer Equipment	175,883	4.55%	7,994
41	392.00	Transportation Equipment	287,389	25.00%	71,847
42	393.00	Stores Equipment	4,593	3.92%	180
43	394.00	Tools, Shop and Garage	67,343	4.14%	2,785
44	395.00	Laboratory Equipment	20,819	3.71%	772
45	396.00	Power Operated Equipment	19,132	5.14%	984
46	397.00	Communication Equipment	152,003	10.28%	15,622
47	398.00	Miscellaneous Equipment	41,886	4.98%	2,086
48		**Subtotal General**	$ 1,902,448		$ 129,836
49					
50					
51					
52		TOTALS	$ 39,022,367		$ 1,556,007
53					
54					
55	Amortization of Deferred Regulatory Assets		$ -	0.00%	-
56					
57	Less: Amotization of Contributions		$ 1,458,672	10.0000%	(145,867)
58	Rebuttal Depreciation Expense				$ 1,410,140
59					
60	Direct Filing Depreciation Expense				1,432,265
61					
62	Increase (decrease) in Depreciation Expense				(22,125)
63					
64	Adjustment to Revenues and/or Expenses				$ (22,125)
65					

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line No.		
1	Adjust Property Taxes to Reflect Proposed Revenues:	
2		
3	Rebuttal Adjusted Revenues in year ended 12/31/01	$ 3,535,680
4	Rebuttal Adjusted Revenues in year ended 12/31/01	3,535,680
5	Proposed Revenues	5,144,536
6	Average of three year's of revenue	$ 4,071,966
7	Average of three year's of revenue, times 2	8,143,931
8	Add:	
9	Construction Work in Progess at 10%	
10	Deduct:	
11	Book Value of Transportation Equipment	287,389
12	Book Value of Transportation Equipment (proforma)	-
13	Total Book Value of Transportation Equipment	$ 287,389
14		
15	Full Cash Value	$ 7,856,543
16	Assessment Ratio	25%
17	Assessed Value	1,964,136
18	Property Tax Rate	8.335765%
19		
20	Property Tax	163,726
21	Tax on Parcels	0
22		
23	Total Rebuttal Property Tax at Proposed Rates	$ 163,726
24	Direct Filing Proposed Property Taxes	168,501
25	Increase (Decrease) in Property Taxes	$ (4,775)
26		
27		
28	Adjustment to Revenues and/or Expenses	$ (4,775)
29		
30		

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line No.		
1	Interest Synchronization with Rate Base	
2		
3	Rebuttal Fair Value Rate Base	$12,221,084
4	Weigted Cost of Debt from Schedule D-1	2.92%
5	Rebuttal Synchronized Interest Expense	356,367
6	Direct Filing Interest Expense	423,801
7	Increase in Interest Expense	$ (67,435)
8		
9	Adjustment to Revenues and/or Expense	$ (67,435)
10		
11		

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
Page 7
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Salaries & Wages Expense (Corpor	$	85,135
5			
6	Direct Filing Proposed Additonal Salaries & Wages Expen	$	162,234
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(77,099)
10			
11	Adjustment to Revenue and/or Expense	$	(77,099)
12			
13			
14			
15			

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Office Expense (Corporate)	$	109,464
5			
6	Direct Filing Proposed Additonal Office Expense (Corporat		146,103
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(36,639)
10			
11	Adjustment to Revenue and/or Expense	$	(36,639)
12			
13			
14			
15			

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
Page 9
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Insurance Expense (Corporate)	$	20,946
5			
6	Direct Filing Proposed Additonal Insurance Expense (Corp		23,250
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(2,304)
10			
11	Adjustment to Revenue and/or Expense	$	(2,304)
12			
13			
14			
15			

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 9

Exhibit
Rebuttal Schedule C-2
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Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Misc. Expense (Corporate)	$	1,210
5			
6	Direct Filing Proposed Additonal Misc. Expense (Corporat		920
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	290
10			
11	Adjustment to Revenue and/or Expense	$	290
12			
13			
14			
15			

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 10

Exhibit
Schedule C-2
Page 11
Witness: Bourassa

Line No.			
1	Service Company Charges		
2			
3	Total 2002 Charges	$ 4,981,460	
4	Allocation Factor (4 factor Formula)	0.1072	
5	Total Charges		$ 534,013
6			
7			
8	Direct Filing Proposed Charges	$ 5,153,711	
9	Allocation Factor (4 factor Formula)	0.1072	
10	Total Charges		552,478
11			
12			
13	Adjustment to Revenues and/or Expenses		$ (18,465)
14			
15			
16			
17			

Arizona American - Sun City West Wastewater
Test Year Ended December 31, 2001
Summary of Cost of Capital

Exhibit
Rebuttal Schedule D-1
Page 1
Witness: Stephenson

Line No.	Item of Capital	End of Test Year Percent of Total	End of Test Year (e) Cost Rate	End of Test Year Weighted Cost	End of Projected Year Percent of Total	End of Projected Year (e) Cost Rate	End of Projected Year Weighted Cost
1	Long-Term Debt	60.00%	4.86%	2.92%	60.00%	4.86%	2.92%
2							
3	Stockholder's Equity (c)	40.00%	11.50%	4.60%	40.00%	11.50%	4.60%
4							
5	Totals	100.00%		7.52%	100.00%		7.52%
6							
7							
8	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

AGUA FRIA WATER

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

Line No.		
1	Fair Value Rate Base	$ 18,346,919
2		
3	Adjusted Operating Income	1,304,666
4		
5	Current Rate of Return	7.11%
6		
7	Required Operating Income	$ 1,378,954
8		
9	Required Rate of Return on Fair Value Rate Base	7.52%
10		
11	Operating Income Deficiency	$ 74,289
12		
13	Gross Revenue Conversion Factor	1.6286
14		
15	Increase in Gross Revenue	
16	Requirement	$ 120,989
17		

18	Customer	Present	Proposed	Dollar	Percent
19	Classification	Rates	Rates	Increase	Increase
20	5/8 Inch Residential	$ 3,127,076	$ 3,193,947	$ 66,870	2.14%
21	3/4 Inch Residential	36,220	36,994	774	2.14%
22	1 Inch Residential	399,199	407,744	8,545	2.14%
23	1.5 Inch Residential	78,797	80,521	1,725	2.19%
24	2 Inch Residential	328,284	335,483	7,199	2.19%
25	3 Inch Residential	563	574	11	2.04%
26	5/8 Inch Commercial	4,629	4,727	98	2.11%
27	3/4 Inch Commercial	4,437	4,533	96	2.16%
28	1 Inch Commercial	31,984	32,673	689	2.16%
29	1.5 Inch Commercial	91,467	93,465	1,997	2.18%
30	2 Inch Commercial	359,785	367,631	7,846	2.18%
31	3 Inch Commercial	359,249	367,044	7,795	2.17%
32	6 Inch Commercial	147,370	150,629	3,259	2.21%
33	2 Inch Public Interruptible	-	-	-	0%
34	3 Inch Public Interruptible	4,838	4,838	-	0.00%
35	6 Inch Public Interruptible	282,872	282,872	-	0.00%
36	8 Inch Public Interruptible	71,829	71,829	-	0.00%
37	10 Inch Public Interruptible	7,554	7,554	-	0.00%
38	4 Inch Prison	248,933	253,863	4,930	1.98%
39	4 Inch Private Fire	2,520	2,570	50	2.00%
40	6 Inch Private Fire	10,890	11,108	218	2.00%
41	8 Inch Private Fire	4,020	4,100	80	2.00%
42	Miscellaneous Revenues	339,961	339,961	-	0.00%
43	Subtotal Water Revenues	$ 5,942,478	$ 6,054,661	$ 112,183	1.89%

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Schedule A-1
Page 2
Witness: Bourassa

Line No.	Customer Classification	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
1	**Revenue Annualizations**				
2	5/8 Inch Residential	$ 202,538	$ 206,861	$ 4,322	2.13%
3	3/4 Inch Residential	1,584	1,618	34	2.14%
4	1 Inch Residential	10,260	10,479	219	2.13%
5	1.5 Inch Residential	5,170	5,283	113	2.19%
6	2 Inch Residential	44,120	45,085	966	2.19%
7	3 Inch Residential	(563)	(574)	(11)	2.04%
8	5/8 Inch Commercial	201	205	4	2.09%
9	3/4 Inch Commercial	(492)	(503)	(11)	2.16%
10	1 Inch Commercial	2,266	2,315	49	2.15%
11	1.5 Inch Commercial	14,983	15,310	326	2.18%
12	2 Inch Commercial	31,582	32,270	687	2.18%
13	3 Inch Commercial	(1,330)	(1,360)	(29)	2.21%
14	6 Inch Commercial	16,136	16,494	357	2.21%
15	6 Inch Public Interruptible	(81,903)	(81,903)	-	0.00%
16	10 Inch Public Interruptible	(7,554)	(7,554)	-	0.00%
17	4 Inch Private Fire	1,440	1,469	29	2.00%
18	6 Inch Private Fire	1,530	1,561	31	2.00%
19	8 Inch Private Fire	1,020	1,040	20	2.00%
20	Totals	240,990	248,096	7,106	2.95%
21	Total Revenues	$ 6,183,467	$ 6,302,757	$ 119,289	1.93%
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39	SUPPORTING SCHEDULES:				
40	Rebuttal B-1				
41	Rebuttal C-1				
42	Rebuttal D-1				
43	Rebuttal H-1				
44					

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Summary of Fair Value Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	RCND Rate base	Fair Value Rate base (RCND Only)
1				
2	Gross Utility Plant in Service	$ 51,067,939	$ 56,030,950	$ 56,030,950
3	Less: Accumulated Depreciation	4,969,080	5,454,713	5,454,713
4				
5	Net Utility Plant in Service	$ 46,098,859	$ 50,576,237	$ 50,576,237
6				
7	Less:			
8	Advances in Aid of			
9	Construction	27,385,370	30,046,803	30,046,803
10	Contributions in Aid of			
11	Construction - Net of amortization	1,973,438	2,165,225	2,165,225
12	Customer Meter Deposits	17,289	17,289	17,289
13	Deferred Income Taxes & Credits	-	-	-
14	Investment tax Credits	-	-	-
15	Plus:			
16	Unamortized Finance			
17	Charges	-	-	-
18	Deferred Tax Assets	-	-	-
19	Allowance for Working Capital	-	-	-
20	Citizens Acquisition Adjustment	13,203,438	-	-
21				
22	Total Rate Base	$ 29,926,200	$ 18,346,919	$ 18,346,919
23				
24				
25				
26	SUPPORTING SCHEDULES:			
27	Rebuttal B-2			
28	Rebuttal B-3			
29	Rebuttal B-4			
30				
31				

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 50,919,882	(1)	148,057	$ 51,067,939
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	4,993,699	(2)	(24,619)	4,969,080
8					
9	Net Utility Plant				
10	in Service	$ 45,926,183			$ 46,098,859
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	27,385,370			27,385,370
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	1,973,438			1,973,438
18	Purposes Only)				
19	Customer Meter Deposits	17,289			17,289
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Unamortized Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	13,305,699	(3)	(102,261)	13,203,438
28					
29	Total	$ 29,855,785			$ 29,926,200
30					
31	SUPPORTING SCHEDULES:				
32	Rebuttal B-2				
33					
34	(1) See Rebuttal B-2, Page 2				
35	(2) See Rebuttal B-2, Page 3				
36	(3) See Rebuttal B-2, Page 4				
37					
38					
39					
40					
41					
42					
43					
44					

Arizona American - Agua Fria
Plant Summary
at December 31, 2002

Exhibit
Rebuttal Schedule B-2
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 1,229	$ -	$ 1,229	$ -	$ -	$ -
3	302.00	Franchises	78,887	-	78,887	-	-	-
4	303.00	Miscellaneous Intangibles	115,264	-	115,264	-	-	-
5		**Subtotal Intangible**	$ 195,380	$ -	$ 195,380	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 217,682	$ -	$ 217,682	$ -	$ -	$ -
9	311.00	Structures and Improvements	1,150,073	50,631	1,200,703	57,920	-	57,920
10	312.00	Collecting and Impounding Res.	-	-	-	-	-	-
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	4,081,995	(29,586)	4,052,408	334,959	-	334,959
13		**Subtotal Source of Supply**	$ 5,449,750	$ 21,045	$ 5,470,794	$ 392,879	$ -	$ 392,879
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 47,681	$ (4,619)	$ 43,062	$ -	$ -	$ -
17	321.00	Structures and Improvements	1,246,735	(11,196)	1,235,539	54,255	(11,196)	43,059
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	14,538,912	75,429	14,614,341	1,984,180	(15,122)	1,969,058
20	326.00	Diesel Pumping Equipment	25,799	-	25,799	19,386	-	19,386
21	328.10	Gas Engine Pumping Equipment	697	-	697	308	-	308
22		**Subtotal Pumping**	$ 15,859,824	$ 59,614	$ 15,919,438	$ 2,058,130	$ (26,318)	$ 2,031,812
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
26	331.00	Structures and Improvements	39,917	-	39,917	3,430	-	3,430
27	332.00	Water Treatment Equipment	387,758	(3,442)	384,316	48,501	(3,442)	45,059
28		**Subtotal Water Treatment**	$ 427,674	$ (3,442)	$ 424,232	$ 51,931	$ (3,442)	$ 48,489
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ 225	$ -	$ 225	$ -	$ -	$ -
32	341.00	Structures and Improvements	-	-	-	-	-	-
33	342.00	Distribution, Reservoirs, & ST	3,145,747	(55,102)	3,090,646	20,686	(34,414)	(13,728)
34	343.00	Transmission and Distribution	21,475,529	(16,055)	21,459,474	1,740,596	(7,710)	1,732,886
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	2,694,167	-	2,694,167	291,721	-	291,721
37	346.00	Meters	1,744,305	-	1,744,305	148,596	-	148,596
38	348.00	Hydrants	2,799,956	5,229	2,805,185	241,703	-	241,703
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Transmission and Distribution**	$ 31,859,929	$ (65,927)	$ 31,794,002	$ 2,443,302	$ (42,124)	$ 2,401,178
41								
42		**General**						
43	389.00	Land and Land Rights	$ 681	$ -	$ 681	$ -	$ -	$ -
44	390.00	Structures and Improvements	467,707	-	467,707	44,422	-	44,422
45	391.00	Office Funiture and Equipment	238,820	(8,514)	230,305	52,075	-	52,075
46	391.10	Computer Equipment	272,602	(84,896)	187,706	(59,456)	-	(59,456)
47	392.00	Transportation Equipment	251,004	-	251,004	181,157	(5,144)	176,013
48	393.00	Stores Equipment	4,012	-	4,012	1,087	-	1,087
49	394.00	Tools, Shop and Garage	66,402	(9,000)	57,402	2,621	-	2,621
50	395.00	Laboratory Equipment	18,183	-	18,183	3,205	-	3,205
51	396.00	Power Operated Equipment	16,803	(93)	16,710	5,979	-	5,979
52	397.00	Communication Equipment	98,945	23,584	122,529	46,642	(51)	46,591
53	398.00	Miscellaneous Equipment	38,697	(2,114)	36,583	19,382	-	19,382
54		**Subtotal General**	$ 1,473,856	$ (81,034)	$ 1,392,822	$ 297,114	$ (5,195)	$ 291,919
55								
56		**Double Booked Advance**	(4,128,730)	-	(4,128,730)	(197,198)	-	(197,198)
57				-	-	-	-	-
58		ADEUC adjustment 3/95	(217,801)	217,801	-	(52,460)	52,460	0
59		TOTAL WATER PLANT	$ 50,919,882	$ 148,057	$ 51,067,939	$ 4,993,698	$ (24,619)	$ 4,969,079
60								
61								
62		SUPPORTING SCHEDULES:						
63		Rebuttal B-2, page 2a, 2b, 3a, 3b						
64								

Arizona American - Agua Fria Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 1,229					-
3	302.00	Franchises	78,887					-
4	303.00	Miscellaneous Intangibles	115,264					-
5		**Subtotal Intangible**	$ 195,380	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 217,682					-
9	311.00	Structures and Improvements	1,150,073					50,631
10	312.00	Collecting and Impounding Res.	-					-
11	313.00	Lakes, Rivers, Other Intakes	-					-
12	314.00	Wells and Springs	4,081,995					(29,586)
13		**Subtotal Source of Supply**	$ 5,449,750	$ -	$ -	$ -	$ -	$ 21,045
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 47,681	(4,619)				-
17	321.00	Structures and Improvements	1,246,735	(11,196)				-
18	323.00	Other Power Production	-					-
19	325.00	Electric Pumping Equipment	14,538,912	(15,122)				90,551
20	326.00	Diesel Pumping Equipment	25,799					-
21	328.10	Gas Engine Pumping Equipment	697					-
22		**Subtotal Pumping**	$ 15,859,824	$ (30,937)	$ -	$ -	$ -	$ 90,551
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					
26	331.00	Structures and Improvements	39,917					
27	332.00	Water Treatment Equipment	387,758	(3,442)				
28		**Subtotal Water Treatment**	$ 427,674	$ (3,442)	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ 225					-
32	341.00	Structures and Improvements	-					-
33	342.00	Distribution, Reservoirs, & ST	3,145,747	(34,414)				(20,688)
34	343.00	Transmission and Distribution	21,475,529	(7,710)				(8,345)
35	344.00	Fire Mains	-					-
36	345.00	Services	2,694,167					-
37	346.00	Meters	1,744,305					-
38	348.00	Hydrants	2,799,956					5,229
39	349.00	Other Transmission & Distribution	-					-
40		**Subtotal Transmission and Distributio**	$ 31,859,929	$ (42,124)	$ -	$ -	$ -	$ (23,803)
41								
42		**General**						
43	389.00	Land and Land Rights	$ 681					-
44	390.00	Structures and Improvements	467,707					-
45	391.00	Office Funiture and Equipment	238,820					(8,514)
46	391.10	Computer Equipment	272,602					-
47	392.00	Transportation Equipment	251,004					-
48	393.00	Stores Equipment	4,012					-
49	394.00	Tools, Shop and Garage	66,402					(9,000)
50	395.00	Laboratory Equipment	18,183					-
51	396.00	Power Operated Equipment	16,803					-
52	397.00	Communication Equipment	98,945					23,584
53	398.00	Miscellaneous Equipment	38,697					-
54		**Subtotal General**	$ 1,473,856	$ -	$ -	$ -	$ -	$ 6,070
55								
56		Double Booked Advance	(4,128,730)					
57			-					
58		ADFUC adjustment 3/95	(217,801)					
59		TOTAL WATER PLANT	$ 50,919,882	$ (76,503)	$ -	$ -	$ -	$ 93,863
60								

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decision	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American - Agua Fria Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Original Cost
1		**Intangible**							
2	301.00	Organization						$ -	$ 1,229
3	302.00	Franchises						-	78,887
4	303.00	Miscellaneous Intangibles						-	115,264
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ 195,380
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights						$ -	$ 217,682
9	311.00	Structures and Improvements						50,631	1,200,703
10	312.00	Collecting and Impounding Res.						-	-
11	313.00	Lakes, Rivers, Other Intakes						-	-
12	314.00	Wells and Springs						(29,586)	4,052,408
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ -	$ -	$ 21,045	$ 5,470,794
14									
15		**Pumping**							
16	320.00	Land and Land Rights						$ (4,619)	$ 43,062
17	321.00	Structures and Improvements						(11,196)	1,235,539
18	323.00	Other Power Production						-	-
19	325.00	Electric Pumping Equipment						75,429	14,614,341
20	326.00	Diesel Pumping Equipment						-	25,799
21	328.10	Gas Engine Pumping Equipment						-	697
22		**Subtotal Pumping**	$ -	$ -	$ -	$ -	$ -	$ 59,614	$ 15,919,438
23									
24		**Water Treatment**						$ -	
25	330.00	Land and Land Rights						-	$ -
26	331.00	Structures and Improvements						-	39,917
27	332.00	Water Treatment Equipment						(3,442)	384,316
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ -	$ -	$ (3,442)	$ 424,232
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights						$ -	$ 225
32	341.00	Structures and Improvements						-	-
33	342.00	Distribution, Reservoirs, & ST						(55,102)	3,090,646
34	343.00	Transmission and Distribution						(16,055)	21,459,474
35	344.00	Fire Mains						-	-
36	345.00	Services						-	2,694,167
37	346.00	Meters						-	1,744,305
38	348.00	Hydrants						5,229	2,805,185
39	349.00	Other Transmission & Distribution						-	-
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ -	$ -	$ (65,927)	$ 31,794,002
41									
42		**General**							
43	389.00	Land and Land Rights			-			$ -	$ 681
44	390.00	Structures and Improvements			-			-	467,707
45	391.00	Office Funiture and Equipment			-			(8,514)	230,305
46	391.10	Computer Equipment			(84,896)			(84,896)	187,706
47	392.00	Transportation Equipment			-			-	251,004
48	393.00	Stores Equipment			-			-	4,012
49	394.00	Tools, Shop and Garage			-			(9,000)	57,402
50	395.00	Laboratory Equipment			-			-	18,183
51	396.00	Power Operated Equipment			(93)			(93)	16,710
52	397.00	Communication Equipment			-			23,584	122,529
53	398.00	Miscellaneous Equipment			(2,114)			(2,114)	36,583
54		**Subtotal General**	$ -	$ -	$ (87,104)	$ -	$ -	$ (81,034)	$ 1,392,822
55									
56		Double Booked Advance						-	(4,128,730)
57								-	-
58		ADFUC adjustment 3/95	217,801					217,801	-
59		TOTAL WATER PLANT	$ 217,801	$ -	$ (87,104)	$ -	$ -	$ 148,057	$ 51,067,939
60									
61									
62									
63									
64									
65									
66									
67									
68									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American - Agua Fria Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					
3	302.00	Franchises	-					
4	303.00	Miscellaneous Intangibles	-					
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ -					
9	311.00	Structures and Improvements	57,920					
10	312.00	Collecting and Impounding Res.	-					
11	313.00	Lakes, Rivers, Other Intakes	-					
12	314.00	Wells and Springs	334,959					
13		**Subtotal Source of Supply**	$ 392,879	$ -	$ -	$ -	$ -	$ -
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ -	-				
17	321.00	Structures and Improvements	54,255	(11,196)				
18	323.00	Other Power Production	-	-				
19	325.00	Electric Pumping Equipment	1,984,180	(15,122)				
20	326.00	Diesel Pumping Equipment	19,386	-				
21	328.10	Gas Engine Pumping Equipment	308	-				
22		**Subtotal Pumping**	$ 2,058,130	$ (26,318)	$ -	$ -	$ -	$ -
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					
26	331.00	Structures and Improvements	3,430	-				
27	332.00	Water Treatment Equipment	48,501	(3,442)				
28		**Subtotal Water Treatment**	$ 51,931	$ (3,442)	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -					
32	341.00	Structures and Improvements	-	-				
33	342.00	Distribution, Reservoirs, & ST	20,686	(34,414)				
34	343.00	Transmission and Distribution	1,740,596	(7,710)				
35	344.00	Fire Mains	-	-				
36	345.00	Services	291,721	-				
37	346.00	Meters	148,596	-				
38	348.00	Hydrants	241,703	-				
39	349.00	Other Transmission & Distribution	-					
40		**Subtotal Transmission and Distributio**	$ 2,443,302	$ (42,124)	$ -	$ -	$ -	$ -
41								
42		**General**						
43	389.00	Land and Land Rights	$ -					
44	390.00	Structures and Improvements	44,422					
45	391.00	Office Funiture and Equipment	52,075					
46	391.10	Computer Equipment	(59,456)					
47	392.00	Transportation Equipment	181,157					
48	393.00	Stores Equipment	1,087					
49	394.00	Tools, Shop and Garage	2,621					
50	395.00	Laboratory Equipment	3,205					
51	396.00	Power Operated Equipment	5,979					
52	397.00	Communication Equipment	46,642					
53	398.00	Miscellaneous Equipment	19,382					
54		**Subtotal General**	$ 297,114	$ -	$ -	$ -	$ -	$ -
55								
56		Double Booked Advance						
57			-					
58		ADFUC adjustment 3/95	(52,460)					
59		TOTAL WATER PLANT	$ 5,190,896	$ (71,884)	$ -	$ -	$ -	$ -
60								
61								
62								
63								
64								
65								
66								
67								
68								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Schedule B-2, Page 6
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decision	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American - Agua Fria Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization						$ -	$ -
3	302.00	Franchises						-	-
4	303.00	Miscellaneous Intangibles						-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights						$ -	$ -
9	311.00	Structures and Improvements						-	57,920
10	312.00	Collecting and Impounding Res.						-	-
11	313.00	Lakes, Rivers, Other Intakes						-	-
12	314.00	Wells and Springs						-	334,959
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ -	$ -	$ -	$ 392,879
14									
15		**Pumping**							
16	320.00	Land and Land Rights						$ -	$ -
17	321.00	Structures and Improvements						(11,196)	43,059
18	323.00	Other Power Production						-	-
19	325.00	Electric Pumping Equipment						(15,122)	1,969,058
20	326.00	Diesel Pumping Equipment						-	19,386
21	328.10	Gas Engine Pumping Equipment						-	308
22		**Subtotal Pumping**	$ -	$ -	$ -	$ -	$ -	$ (26,318)	$ 2,031,812
23									
24		**Water Treatment**							
25	330.00	Land and Land Rights						$ -	$ -
26	331.00	Structures and Improvements						-	3,430
27	332.00	Water Treatment Equipment						(3,442)	45,059
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ -	$ -	$ (3,442)	$ 48,489
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights						$ -	$ -
32	341.00	Structures and Improvements						-	-
33	342.00	Distribution, Reservoirs, & ST						(34,414)	(13,728)
34	343.00	Transmission and Distribution						(7,710)	1,732,886
35	344.00	Fire Mains						-	-
36	345.00	Services						-	291,721
37	346.00	Meters						-	148,596
38	348.00	Hydrants						-	241,703
39	349.00	Other Transmission & Distribution						-	-
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ -	$ -	$ (42,124)	$ 2,401,178
41									
42		**General**							
43	389.00	Land and Land Rights						$ -	$ -
44	390.00	Structures and Improvements			-			-	44,422
45	391.00	Office Furniture and Equipment			-			-	52,075
46	391.10	Computer Equipment			-			-	(59,456)
47	392.00	Transportation Equipment			(5,144)			(5,144)	176,013
48	393.00	Stores Equipment			-			-	1,087
49	394.00	Tools, Shop and Garage			-			-	2,621
50	395.00	Laboratory Equipment			-			-	3,205
51	396.00	Power Operated Equipment			-			-	5,979
52	397.00	Communication Equipment			(51)			(51)	46,591
53	398.00	Miscellaneous Equipment			-			-	19,382
54		**Subtotal General**	$ -	$ -	$ (5,195)	$ -	$ -	$ (5,195)	$ 291,919
55									
56		Double Booked Advance							
57								-	-
58		ADFUC adjustment 3/95	52,460					52,460	0
59		TOTAL WATER PLANT	$ 52,460	$ -	$ (5,195)	$ -	$ -	$ (24,619)	$ 5,166,277
60									

61	ADJ #		Reference
62	6	Remove AFUDC Adjustment	ACC Staff
63	7	Acquisition Adjustment	
64	8	Common Plant Adjustments	Rebuttal B-2, Page 4
65	9		
66	10		
67			
68			

Arizona American - Agua Fria
Common Plant Allocation
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Original Cost	Rebuttal Allocated Original Cost	Rebuttal Allocated Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.13965	$ 681	$ 681	$ -	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.13965	467,707	467,707	-	43,425	43,425	-
5	391.00	Office Funiture and Equipment	0.13965	139,320	139,320	-	50,343	50,343	-
6	391.10	Computer Equipment	0.13965	199,465	114,569	(84,896)	(60,705)	(65,849)	(5,144)
7	392.00	Transportation Equipment	0.13965	251,004	251,004	-	144,977	144,977	-
8	393.00	Stores Equipment	0.13965	4,012	4,012	-	1,087	1,087	-
9	394.00	Tools, Shop and Garage	0.13965	57,402	57,402	-	2,547	2,547	-
10	395.00	Laboratory Equipment	0.13965	18,183	18,183	-	3,205	3,205	-
11	396.00	Power Operated Equipment	0.13965	16,803	16,710	(93)	5,979	5,927	(51)
12	397.00	Communication Equipment	0.13965	80,645	80,645	-	46,447	46,447	-
13	398.00	Miscellaneous Equipment	0.13965	38,697	36,583	(2,114)	17,939	15,825	(2,114)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 1,273,919	$ 1,186,815	$ (87,104)	$ 255,243	$ 247,934	$ (7,309)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-2, Page 5								
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1								
2	389.00		0 $ 4,880	$ -	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements	3,349,189	-	3,349,189	310,963	-	310,963
4	391.00	Office Funiture and Equipment	997,650	-	997,650	360,503	-	360,503
5	391.10	Computer Equipment	1,428,345	(607,932)	820,413	(434,702)	(36,834)	(471,536)
6	392.00	Transportation Equipment	1,797,409	-	1,797,409	1,038,162	-	1,038,162
7	393.00	Stores Equipment	28,727	-	28,727	7,782	-	7,782
8	394.00	Tools, Shop and Garage	411,051	-	411,051	18,237	-	18,237
9	395.00	Laboratory Equipment	130,207	-	130,207	22,954	-	22,954
10	396.00	Power Operated Equipment	120,325	(669)	119,656	42,813	(368)	42,444
11	397.00	Communication Equipment	577,488	-	577,488	332,600	-	332,600
12	398.00	Miscellaneous Equipment	277,101	(15,137)	261,964	128,455	(15,137)	113,318
13								
14								
15		TOTALCOMMON PLANT	$ 9,122,373	$ (623,738)	$ 8,498,635	$ 1,827,766	$ (52,339)	$ 1,775,427
16								
17			SUPPORTING SCHEDULES					
18			Rebuttal Schedule B-2, Page 6 and 7					
19								
20								

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Sun City West Water UnIdentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880						
3	390.00	Structures and Improvements	3,349,189						
4	391.00	Office Funiture and Equipment	997,650						
5	391.10	Computer Equipment	1,428,345		(607,932)				
6	392.00	Transportation Equipment	1,797,409						
7	393.00	Stores Equipment	28,727						
8	394.00	Tools, Shop and Garage	411,051						
9	395.00	Laboratory Equipment	130,207						
10	396.00	Power Operated Equipment	120,325		(669)				
11	397.00	Communication Equipment	577,488						
12	398.00	Miscellaneous Equipment	277,101	(458)		(14,679)			
13		**Subtotal General**	$ 9,122,373	$ (458)	$ (608,601)	$ (14,679)	$ -	$ -	$ -
14									

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
2	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
3	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights							$ -	$ 4,880
3	390.00	Structures and Improvements							-	3,349,189
4	391.00	Office Funiture and Equipment							-	997,650
5	391.10	Computer Equipment							(607,932)	820,413
6	392.00	Transportation Equipment							-	1,797,409
7	393.00	Stores Equipment							-	28,727
8	394.00	Tools, Shop and Garage							-	411,051
9	395.00	Laboratory Equipment							-	130,207
10	396.00	Power Operated Equipment							(669)	119,656
11	397.00	Communication Equipment							-	577,488
12	398.00	Miscellaneous Equipment							(15,137)	261,964
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (623,738)	$ 8,498,635
14										
15			ADJ #			Reference				
16			6							
17			7							
18			8							
19			9							
20			10							
21										
22										
23										

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7a
Witness: Bour

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -						
3	390.00	Structures and Improvements	310,963						
4	391.00	Office Funiture and Equipment	360,503						
5	391.10	Computer Equipment	(434,702)		(36,834)				
6	392.00	Transportation Equipment	1,038,162						
7	393.00	Stores Equipment	7,782						
8	394.00	Tools, Shop and Garage	18,237						
9	395.00	Laboratory Equipment	22,954						
10	396.00	Power Operated Equipment	42,813		(368)				
11	397.00	Communication Equipment	332,600						
12	398.00	Miscellaneous Equipment	128,455	(458)		(14,679)			
13		**Subtotal General**	$ 1,827,766	$ (458)	$ (37,202)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights							$ -	$ -
3	390.00	Structures and Improvements							-	310,963
4	391.00	Office Funiture and Equipment							-	360,503
5	391.10	Computer Equipment							(36,834)	(471,536)
6	392.00	Transportation Equipment							-	1,038,162
7	393.00	Stores Equipment							-	7,782
8	394.00	Tools, Shop and Garage							-	18,237
9	395.00	Laboratory Equipment							-	22,954
10	396.00	Power Operated Equipment							(368)	42,444
11	397.00	Communication Equipment							-	332,600
12	398.00	Miscellaneous Equipment							(15,137)	113,318
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (52,339)	$ 1,775,427
14										
15			ADJ #		Reference					
16			6							
17			7							
18			8							
19			9							
20			10							
21										
22										
23										

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
RCND Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-3
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 58,322,512	(1)	(2,291,562)	$ 56,030,950
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	5,658,666	(2)	(203,953)	5,454,713
8					
9	Net Utility Plant				
10	in Service	$ 52,663,846			$ 50,576,237
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	31,366,601	(3)	(1,319,797)	30,046,803
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	2,260,332	(4)	(95,107)	2,165,225
18	Purposes Only)				
19	Customer Meter Deposits	17,289			17,289
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Unamortized Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	-			-
28					
29	Total	$ 19,019,624			$ 18,346,919
30					
31					
32					
33	(1) See B-3, Page 2				
34	(2) See B-3, Page 3				
35	(3) Adjust AIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
36	(4) Adjust CIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
37					
38					
39					
40					
41					
42					

Arizona American - Agua Fria
RCND Plant Summary
at December 31, 2002

Exhibit
Rebuttal Schedule B-3
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ 3,247	$ (2,018)	$ 1,229	$ -	$ -	$ -
3	302.00	Franchises	137,066	(58,179)	78,887	-	-	-
4	303.00	Miscellaneous Intangibles	127,581	(12,317)	115,264	-	-	-
5		**Subtotal Intangible**	$ 267,894	$ (72,515)	$ 195,380	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 278,216	$ (60,534)	$ 217,682	$ -	$ -	$ -
9	311.00	Structures and Improvements	1,257,045	30,262	1,287,307	62,006	(778)	61,228
10	312.00	Collecting and Impounding Res.	-	-	-	-	-	-
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	4,467,115	(147,093)	4,320,021	366,776	(9,708)	357,068
13		**Subtotal Source of Supply**	$ 6,002,376	$ (177,365)	$ 5,825,011	$ 428,782	$ (10,486)	$ 418,296
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 55,756	$ (8,076)	$ 47,681	$ -	$ -	$ -
17	321.00	Structures and Improvements	1,373,902	(25,934)	1,347,968	58,728	(12,697)	46,031
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	16,195,896	(228,003)	15,967,893	2,174,274	(51,184)	2,123,090
20	326.00	Diesel Pumping Equipment	39,034	6,683	45,717	29,038	4,874	33,912
21	328.10	Gas Engine Pumping Equipment	913	80	993	398	34	432
22		**Subtotal Pumping**	$ 17,665,501	$ (255,249)	$ 17,410,252	$ 2,262,438	$ (58,973)	$ 2,203,465
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
26	331.00	Structures and Improvements	51,378	(838)	50,540	3,430	-	3,430
27	332.00	Water Treatment Equipment	435,539	(21,789)	413,750	54,077	(4,708)	49,369
28		**Subtotal Water Treatment**	$ 486,917	$ (22,627)	$ 464,290	$ 57,507	$ (4,708)	$ 52,799
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ 387	$ (162)	$ 225	$ -	$ -	$ -
32	341.00	Structures and Improvements	-	-	-	-	-	-
33	342.00	Distribution, Reservoirs, & ST	3,401,851	(112,759)	3,289,093	20,399	(36,768)	(16,369)
34	343.00	Transmission and Distribution	25,359,648	(1,666,147)	23,693,501	2,026,962	(130,113)	1,896,849
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	3,164,189	(185,126)	2,979,063	336,789	(17,751)	319,038
37	346.00	Meters	1,946,770	(72,717)	1,874,053	163,305	(5,283)	158,022
38	348.00	Hydrants	3,229,305	126,876	3,356,180	274,475	9,285	283,760
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Transmission and Distribution**	$ 37,102,150	$ (1,910,036)	$ 35,192,115	$ 2,821,930	$ (180,629)	$ 2,641,301
41								
42		**General**						
43	389.00	Land and Land Rights	$ 1,764	$ (1,082)	$ 681	$ -	$ -	$ -
44	390.00	Structures and Improvements	634,779	(16,575)	618,204	71,666	(2,315)	69,351
45	391.00	Office Funiture and Equipment	279,220	(8,348)	270,872	71,855	1,323	73,178
46	391.10	Computer Equipment	295,002	(95,864)	199,137	(66,278)	(4,957)	(71,236)
47	392.00	Transportation Equipment	277,729	(3,894)	273,836	197,556	(2,339)	195,217
48	393.00	Stores Equipment	5,232	54	5,286	1,529	50	1,580
49	394.00	Tools, Shop and Garage	82,149	(9,122)	73,027	2,044	57	2,101
50	395.00	Laboratory Equipment	21,048	(217)	20,831	3,820	(15)	3,804
51	396.00	Power Operated Equipment	21,557	228	21,785	7,829	59	7,888
52	397.00	Communication Equipment	115,755	22,109	137,864	58,223	(410)	57,813
53	398.00	Miscellaneous Equipment	55,087	(3,750)	51,337	28,902	(3,880)	25,022
54		**Subtotal General**	$ 1,789,320	$ (116,461)	$ 1,672,859	$ 377,146	$ (12,427)	$ 364,719
55								
56		**Double Booked Advance**	(4,728,957)	-	(4,728,957)	(225,866)	-	(225,866)
57								
58		AFUDC adjustment 3/95	(262,690)	262,690	0	(63,271)	63,271	(0)
59		TOTAL WATER PLANT	$ 58,322,512	$ (2,291,562)	$ 56,030,950	$ 5,658,666	$ (203,953)	$ 5,454,713
60								
61								
62		SUPPORTING SCHEDULES:						
63		Rebuttal B-2, page 2a, 2b, 3a, 3b						
64								
65								

Arizona American - Agua Fria Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ 3,247					-
3	302.00	Franchises	137,066					-
4	303.00	Miscellaneous Intangibles	127,581					-
5		**Subtotal Intangible**	$ 267,894	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 278,216					-
9	311.00	Structures and Improvements	1,257,045					50,631
10	312.00	Collecting and Impounding Res.	-					-
11	313.00	Lakes, Rivers, Other Intakes	-					-
12	314.00	Wells and Springs	4,467,115					(29,586)
13		**Subtotal Source of Supply**	$ 6,002,376	$ -	$ -	$ -	$ -	$ 21,045
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 55,756	(5,459)				-
17	321.00	Structures and Improvements	1,373,902	(17,945)				-
18	323.00	Other Power Production	-					-
19	325.00	Electric Pumping Equipment	16,195,896	(19,044)				90,551
20	326.00	Diesel Pumping Equipment	39,034					-
21	328.10	Gas Engine Pumping Equipment	913					-
22		**Subtotal Pumping**	$ 17,665,501	$ (42,447)	$ -	$ -	$ -	$ 90,551
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					-
26	331.00	Structures and Improvements	51,378					-
27	332.00	Water Treatment Equipment	435,539	(4,795)				(10,260)
28		**Subtotal Water Treatment**	$ 486,917	$ (4,795)	$ -	$ -	$ -	$ (10,260)
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ 387					-
32	341.00	Structures and Improvements	-					-
33	342.00	Distribution, Reservoirs, & ST	3,401,851	(48,781)				(20,688)
34	343.00	Transmission and Distribution	25,359,648	(12,358)				(8,345)
35	344.00	Fire Mains	-					-
36	345.00	Services	3,164,189					-
37	346.00	Meters	1,946,770					-
38	348.00	Hydrants	3,229,305					5,229
39	349.00	Other Transmission & Distribution	-					-
40		**Subtotal Transmission and Distributi**	$ 37,102,150	$ (61,138)	$ -	$ -	$ -	$ (23,803)
41								
42		**General**						
43	389.00	Land and Land Rights	$ 1,764					-
44	390.00	Structures and Improvements	634,779					-
45	391.00	Office Funiture and Equipment	279,220					(8,514)
46	391.10	Computer Equipment	295,002					-
47	392.00	Transportation Equipment	277,729					-
48	393.00	Stores Equipment	5,232					-
49	394.00	Tools, Shop and Garage	82,149					(9,000)
50	395.00	Laboratory Equipment	21,048					-
51	396.00	Power Operated Equipment	21,557					-
52	397.00	Communication Equipment	115,755					23,584
53	398.00	Miscellaneous Equipment	55,087					-
54		**Subtotal General**	$ 1,789,320	$ -	$ -	$ -	$ -	$ 6,070
55								
56		Double Booked Advance	(4,728,957)					
57			-					
58		ADFUC adjustment 3/95	(262,690)					
59		TOTAL WATER PLANT	$ 58,322,512	$ (108,381)	$ -	$ -	$ -	$ 83,602
60								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Sched B-3, Page 8
2	Unidentified Plant	Blank
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decision	Blank
5	Post Test Year Plant	ACC Staff

Arizona American - Agua Fria Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Trended Reproduction Cost New
1		**Intangible**							
2	301.00	Organization				(2,018)		$ (2,018)	$ 1,229
3	302.00	Franchises				(58,179)		(58,179)	78,887
4	303.00	Miscellaneous Intangibles				(12,317)		(12,317)	115,264
5		**Subtotal Intangible**	$ -	$ -	$ -	$ (72,515)	$ -	$ (72,515)	$ 195,380
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights				(60,534)		$ (60,534)	$ 217,682
9	311.00	Structures and Improvements				(20,369)		30,262	1,287,307
10	312.00	Collecting and Impounding Res.				-		-	-
11	313.00	Lakes, Rivers, Other Intakes				-		-	-
12	314.00	Wells and Springs				(117,507)		(147,093)	4,320,021
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ (198,410)	$ -	$ (177,365)	$ 5,825,011
14									
15		**Pumping**							
16	320.00	Land and Land Rights				(2,617)		$ (8,076)	$ 47,681
17	321.00	Structures and Improvements				(7,989)		(25,934)	1,347,968
18	323.00	Other Power Production				-		-	-
19	325.00	Electric Pumping Equipment				(299,511)		(228,003)	15,967,893
20	326.00	Diesel Pumping Equipment				6,683		6,683	45,717
21	328.10	Gas Engine Pumping Equipment				80		80	993
22		**Subtotal Pumping**	$ -	$ -	$ -	$ (303,353)	$ -	$ (255,249)	$ 17,410,252
23									
24		**Water Treatment**						$ -	
25	330.00	Land and Land Rights				-		-	$ -
26	331.00	Structures and Improvements				(838)		(838)	50,540
27	332.00	Water Treatment Equipment				(6,734)		(21,789)	413,750
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ (7,572)	$ -	$ (22,627)	$ 464,290
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights				(162)		$ (162)	$ 225
32	341.00	Structures and Improvements				-		-	-
33	342.00	Distribution, Reservoirs, & ST				(43,290)		(112,759)	3,289,093
34	343.00	Transmission and Distribution				(1,645,445)		(1,666,147)	23,693,501
35	344.00	Fire Mains				-		-	-
36	345.00	Services				(185,126)		(185,126)	2,979,063
37	346.00	Meters				(72,717)		(72,717)	1,874,053
38	348.00	Hydrants				121,646		126,876	3,356,180
39	349.00	Other Transmission & Distribution				-		-	-
40		**Subtotal Transmission and Distributi**	$ -	$ -	$ -	$ (1,825,094)	$ -	$ (1,910,036)	$ 35,192,115
41									
42		**General**							
43	389.00	Land and Land Rights			(1,082)			$ (1,082)	$ 681
44	390.00	Structures and Improvements			(16,575)			(16,575)	618,204
45	391.00	Office Furniture and Equipment			166			(8,348)	270,872
46	391.10	Computer Equipment			(95,864)			(95,864)	199,137
47	392.00	Transportation Equipment			(3,894)			(3,894)	273,836
48	393.00	Stores Equipment			54			54	5,286
49	394.00	Tools, Shop and Garage			(122)			(9,122)	73,027
50	395.00	Laboratory Equipment			(217)			(217)	20,831
51	396.00	Power Operated Equipment			228			228	21,785
52	397.00	Communication Equipment			(1,475)			22,109	137,864
53	398.00	Miscellaneous Equipment			(3,750)			(3,750)	51,337
54		**Subtotal General**	$ -	$ -	$ (122,531)	$ -	$ -	$ (116,461)	$ 1,672,859
55									
56		Double Booked Advance						-	(4,728,957)
57								-	-
58		ADFUC adjustment 3/95	262,690					262,690	0
59		TOTAL WATER PLANT	$ 262,690	$ -	$ (122,531)	$ (2,406,943)	$ -	$ (2,291,562)	$ 56,030,950
60									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American - Agua Fria Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					
3	302.00	Franchises	-					
4	303.00	Miscellaneous Intangibles	-					
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ -					
9	311.00	Structures and Improvements	62,006					
10	312.00	Collecting and Impounding Res.	-					
11	313.00	Lakes, Rivers, Other Intakes	-					
12	314.00	Wells and Springs	366,776					
13		**Subtotal Source of Supply**	$ 428,782	$ -	$ -	$ -	$ -	$ -
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ -	-				
17	321.00	Structures and Improvements	58,728	(17,945)				
18	323.00	Other Power Production	-	-				
19	325.00	Electric Pumping Equipment	2,174,274	(19,044)				
20	326.00	Diesel Pumping Equipment	29,038	-				
21	328.10	Gas Engine Pumping Equipment	398	-				
22		**Subtotal Pumping**	$ 2,262,438	$ (36,989)	$ -	$ -	$ -	$ -
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					
26	331.00	Structures and Improvements	3,430	-				
27	332.00	Water Treatment Equipment	54,077	(4,795)				
28		**Subtotal Water Treatment**	$ 57,507	$ (4,795)	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -					
32	341.00	Structures and Improvements	-	-				
33	342.00	Distribution, Reservoirs, & ST	20,399	(48,781)				
34	343.00	Transmission and Distribution	2,026,962	(12,358)				
35	344.00	Fire Mains	-	-				
36	345.00	Services	336,789	-				
37	346.00	Meters	163,305	-				
38	348.00	Hydrants	274,475	-				
39	349.00	Other Transmission & Distribution	-					
40		**Subtotal Transmission and Distributi**	$ 2,821,930	$ (61,138)	$ -	$ -	$ -	$ -
41								
42		**General**						
43	389.00	Land and Land Rights	$ -					
44	390.00	Structures and Improvements	71,666					
45	391.00	Office Funiture and Equipment	71,855					
46	391.10	Computer Equipment	(66,278)					
47	392.00	Transportation Equipment	197,556					
48	393.00	Stores Equipment	1,529					
49	394.00	Tools, Shop and Garage	2,044					
50	395.00	Laboratory Equipment	3,820					
51	396.00	Power Operated Equipment	7,829					
52	397.00	Communication Equipment	58,223					
53	398.00	Miscellaneous Equipment	28,902					
54		**Subtotal General**	$ 377,146	$ -	$ -	$ -	$ -	$ -
55								
56		Double Booked Advance	(225,866)					
57			-					
58		ADFUC adjustment 3/95	(63,271)					
59		TOTAL WATER PLANT	$ 5,658,666	$ (102,922)	$ -	$ -	$ -	$ -
60								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Sched B-3, Page 8
2	Unidentified Plant	Blank
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decision	Blank
5	Post Test Year Plant	ACC Staff

Arizona American - Agua Fria Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization				-		$ -	$ -
3	302.00	Franchises				-		-	-
4	303.00	Miscellaneous Intangibles				-		-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights				-		$ -	$ -
9	311.00	Structures and Improvements				(778)		(778)	61,228
10	312.00	Collecting and Impounding Res.				-		-	-
11	313.00	Lakes, Rivers, Other Intakes				-		-	-
12	314.00	Wells and Springs				(9,708)		(9,708)	357,068
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ (10,486)	$ -	$ (10,486)	$ 418,296
14									
15		**Pumping**							
16	320.00	Land and Land Rights				-		$ -	$ -
17	321.00	Structures and Improvements				5,248		(12,697)	46,031
18	323.00	Other Power Production				-		-	-
19	325.00	Electric Pumping Equipment				(32,140)		(51,184)	2,123,090
20	326.00	Diesel Pumping Equipment				4,874		4,874	33,912
21	328.10	Gas Engine Pumping Equipment				34		34	432
22		**Subtotal Pumping**	$ -	$ -	$ -	$ (21,985)	$ -	$ (58,973)	$ 2,203,465
23									
24		**Water Treatment**							
25	330.00	Land and Land Rights				-		$ -	$ -
26	331.00	Structures and Improvements				-		-	3,430
27	332.00	Water Treatment Equipment				86		(4,708)	49,369
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ 86	$ -	$ (4,708)	$ 52,799
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights				-		$ -	$ -
32	341.00	Structures and Improvements				-		-	-
33	342.00	Distribution, Reservoirs, & ST				12,013		(36,768)	(16,369)
34	343.00	Transmission and Distribution				(117,756)		(130,113)	1,896,849
35	344.00	Fire Mains				-		-	-
36	345.00	Services				(17,751)		(17,751)	319,038
37	346.00	Meters				(5,283)		(5,283)	158,022
38	348.00	Hydrants				9,285		9,285	283,760
39	349.00	Other Transmission & Distribution				-		-	-
40		**Subtotal Transmission and Distributi**	$ -	$ -	$ -	$ (119,491)	$ -	$ (180,629)	$ 2,641,301
41									
42		**General**							
43	389.00	Land and Land Rights			-			$ -	$ -
44	390.00	Structures and Improvements			(2,315)			(2,315)	69,351
45	391.00	Office Funiture and Equipment			1,323			1,323	73,178
46	391.10	Computer Equipment			(4,957)			(4,957)	(71,236)
47	392.00	Transportation Equipment			(2,339)			(2,339)	195,217
48	393.00	Stores Equipment			50			50	1,580
49	394.00	Tools, Shop and Garage			57			57	2,101
50	395.00	Laboratory Equipment			(15)			(15)	3,804
51	396.00	Power Operated Equipment			59			59	7,888
52	397.00	Communication Equipment			(410)			(410)	57,813
53	398.00	Miscellaneous Equipment			(3,880)			(3,880)	25,022
54		**Subtotal General**	$ -	$ -	$ (12,427)	$ -	$ -	$ (12,427)	$ 364,719
55									
56		Double Booked Advance						-	(225,866)
57								-	-
58		ADFUC adjustment 3/95	63,271					63,271	(0)
59		TOTAL WATER PLANT	$ 63,271	$ -	$ (12,427)	$ (151,875)	$ -	$ (203,953)	$ 5,454,713
60									
61									
62									
63									
64									
65									
66									
67									
68									

ADJ #		Reference
6	Remove Trended AFUDC Adjustment	
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American - Agua Fria
RCND Common Plant Allocation
at December 31, 2001

Exhibit
Schedule B-3
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Trended Amount	Rebuttal Allocated Trended Amount	Rebuttal Allocated Trended Adjustment	Direct Allocated Accumulated Depreciation	Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.13965	$ 1,764	$ 681	$ (1,082)	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.13965	634,779	618,204	(16,575)	70,670	68,355	(2,315)
5	391.00	Office Funiture and Equipment	0.13965	179,720	179,887	166	70,123	71,446	1,323
6	391.10	Computer Equipment	0.13965	221,865	126,000	(95,864)	(67,528)	(72,485)	(4,957)
7	392.00	Transportation Equipment	0.13965	277,729	273,836	(3,894)	161,376	159,037	(2,339)
8	393.00	Stores Equipment	0.13965	5,232	5,286	54	1,529	1,580	50
9	394.00	Tools, Shop and Garage	0.13965	73,149	73,027	(122)	1,970	2,027	57
10	395.00	Laboratory Equipment	0.13965	21,048	20,831	(217)	3,820	3,804	(15)
11	396.00	Power Operated Equipment	0.13965	21,557	21,785	228	7,829	7,888	59
12	397.00	Communication Equipment	0.13965	97,455	95,980	(1,475)	58,027	57,617	(410)
13	398.00	Miscellaneous Equipment	0.13965	55,087	51,337	(3,750)	27,459	23,579	(3,880)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 1,589,383	$ 1,466,852	$ (122,531)	$ 335,276	$ 322,848	$ (12,427)
20									
21									
22		SUPPORTING SCHEDULES							
23		Rebuttal B-3, Page 5							
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 5
Witness: Bourassa

Line No.	Account No.	Description		Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Trended Direct Accumulated Depreciation	Adjustment	Rebuttal Trended Accumulated Depreciation
1									
2	389.00		0	$ 12,628	$ (7,748)	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements		4,545,571	(118,688)	4,426,882	506,059	(16,579)	489,480
4	391.00	Office Funiture and Equipment		1,286,955	1,191	1,288,146	502,142	9,471	511,613
5	391.10	Computer Equipment		1,588,744	(686,472)	902,272	(483,558)	(35,499)	(519,057)
6	392.00	Transportation Equipment		1,988,785	(27,882)	1,960,903	1,155,595	(16,750)	1,138,845
7	393.00	Stores Equipment		37,463	387	37,850	10,952	359	11,312
8	394.00	Tools, Shop and Garage		523,808	(874)	522,934	14,105	411	14,516
9	395.00	Laboratory Equipment		150,719	(1,554)	149,166	27,352	(109)	27,243
10	396.00	Power Operated Equipment		154,364	1,634	155,998	56,063	425	56,488
11	397.00	Communication Equipment		697,864	(10,566)	687,298	415,524	(2,934)	412,590
12	398.00	Miscellaneous Equipment		394,470	(26,855)	367,615	196,632	(27,786)	168,847
13									
14									
15		TOTALCOMMON PLANT		$ 11,381,370	$ (877,427)	$ 10,503,943	$ 2,400,866	$ (88,989)	$ 2,311,877
16									
17									
18									
19									
20									

SUPPORTING SCHEDULES
Rebuttal Schedule B-3, Page 6a, 6b, 7a, 7b

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6a

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880				(6,755)	-	-
3	390.00	Structures and Improvements	3,349,189				(78,054)	-	(2,575)
4	391.00	Office Furniture and Equipment	997,650				5,995	(2,202)	6,085
5	391.10	Computer Equipment	1,428,345		(670,782)		(12,717)	-	(2,402)
6	392.00	Transportation Equipment	1,797,409				(14,376)	(109)	(3,537)
7	393.00	Stores Equipment	28,727				732	-	59
8	394.00	Tools, Shop and Garage	411,051				1,875	(1,135)	(212)
9	395.00	Laboratory Equipment	130,207				(52)	-	116
10	396.00	Power Operated Equipment	120,325		(799)		3,730	-	(1,226)
11	397.00	Communication Equipment	577,488				(1,313)	-	1,715
12	398.00	Miscellaneous Equipment	277,101	(670)		(39,030)	12,635	(43)	454
13		**Subtotal General**	$ 9,122,373	$ (670)	$ (671,581)	$ (39,030)	$ (88,300)	$ (3,489)	$ (1,523)
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights	-	(993)	-	-	-		$ (7,748)	$ (2,868)
3	390.00	Structures and Improvements	(17,341)	(10)	(3,192)	(2,612)	(14,906)		(118,688)	3,230,501
4	391.00	Office Funiture and Equipment	(4,567)	(247)	(2,019)	(906)	(947)		1,191	998,841
5	391.10	Computer Equipment	241	(255)	(556)	-	-		(686,472)	741,874
6	392.00	Transportation Equipment	(5,231)	(404)	(4,372)	148	-		(27,882)	1,769,527
7	393.00	Stores Equipment	(246)	(158)	-	-	-		387	29,114
8	394.00	Tools, Shop and Garage	(1,038)	(270)	(94)	-	-		(874)	410,177
9	395.00	Laboratory Equipment	124	-	-	(727)	(1,015)		(1,554)	128,654
10	396.00	Power Operated Equipment	11	-	-	(82)	-		1,634	121,959
11	397.00	Communication Equipment	(10,889)	(83)	3	-	-		(10,566)	566,923
12	398.00	Miscellaneous Equipment	413	(17)	(609)	11	-		(26,855)	250,246
13		**Subtotal General**	$ (38,523)	$ (2,436)	$ (10,839)	$ (4,168)	$ (16,868)	$ -	$ (877,427)	$ 8,244,946
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 7a

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -				-	-	-
3	390.00	Structures and Improvements	310,963				(14,303)	-	(901)
4	391.00	Office Furniture and Equipment	360,503				3,247	526	6,108
5	391.10	Computer Equipment	(434,702)		(40,657)		5,273	-	118
6	392.00	Transportation Equipment	1,038,162				(9,526)	(109)	(2,171)
7	393.00	Stores Equipment	7,782				357	-	46
8	394.00	Tools, Shop and Garage	18,237				175	442	(60)
9	395.00	Laboratory Equipment	22,954				(18)	-	43
10	396.00	Power Operated Equipment	42,813		(440)		1,414	-	(546)
11	397.00	Communication Equipment	332,600				(1,154)	-	1,730
12	398.00	Miscellaneous Equipment	128,455	(670)		(39,030)	8,302	3,466	213
13		**Subtotal General**	$ 1,827,766	$ (670)	$ (41,096)	$ (39,030)	$ (6,233)	$ 4,325	$ 4,581
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
7b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights	-	-	-	-	-		$ -	$ -
3	390.00	Structures and Improvements	(492)	(2)	(259)	(93)	(529)		(16,579)	294,384
4	391.00	Office Funiture and Equipment	82	(44)	(274)	(80)	(94)		9,471	369,974
5	391.10	Computer Equipment	(9)	(178)	(48)	-	-		(35,499)	(470,201)
6	392.00	Transportation Equipment	(1,564)	(313)	(3,018)	(49)	-		(16,750)	1,021,413
7	393.00	Stores Equipment	5	(48)	-	-	-		359	8,141
8	394.00	Tools, Shop and Garage	(89)	(38)	(19)	-	-		411	18,648
9	395.00	Laboratory Equipment	28	-	-	(58)	(104)		(109)	22,845
10	396.00	Power Operated Equipment	1	-	-	(4)	-		425	43,238
11	397.00	Communication Equipment	(3,485)	(28)	3	-	-		(2,934)	329,666
12	398.00	Miscellaneous Equipment	150	(3)	(213)	0	-		(27,786)	100,670
13		**Subtotal General**	$ (5,372)	$ (654)	$ (3,829)	$ (284)	$ (727)	$ -	$ (88,989)	$ 1,738,777
14										
15										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

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Arizona-American Agua Fria Water
B-3 Adjustments

Exhibit B-4
Page A1
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	B-2 Adjustments	Adjusted Original Cost	O.C. A/D	B-2 Adjustments
1		**Intangible**					
2	301.00	Organization	1,229	-	1,229	-	-
3	302.00	Franchises	78,887	-	78,887	-	-
4	303.00	Miscellaneous Intangibles	115,264	-	115,264	-	-
5		**Subtotal Intangible**	195,380	-	195,380	-	-
6							
7		**Source of Supply**					
8	310.00	Land and Land Rights	217,682	-	217,682	-	-
9	311.00	Structures and Improvements	1,144,167	-	1,144,167	43,705	-
10	312.00	Collecting and Impounding Res.	-	-	-	-	-
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-
12	314.00	Wells and Springs	3,438,215	-	3,438,215	284,050	-
13		**Subtotal Source of Supply**	4,800,065	-	4,800,065	327,755	-
14							
15		**Pumping**					
16	320.00	Land and Land Rights	47,681	(4,619)	43,062	-	-
17	321.00	Structures and Improvements	1,246,735	(11,196)	1,235,539	43,850	(11,196)
18	323.00	Other Power Production	-	-	-	-	-
19	325.00	Electric Pumping Equipment	14,495,886	(15,122)	14,480,764	1,663,002	(15,122)
20	326.00	Diesel Pumping Equipment	25,799	-	25,799	18,816	-
21	328.10	Gas Engine Pumping Equipment	697	-	697	292	-
22		**Subtotal Pumping**	15,816,798	(30,937)	15,785,861	1,725,960	(26,318)
23							
24		**Water Treatment**					
25	330.00	Land and Land Rights	-	-	-	-	-
26	331.00	Structures and Improvements	39,917	-	39,917	-	-
27	332.00	Water Treatment Equipment	377,497	(3,442)	374,055	44,052	(3,442)
28		**Subtotal Water Treatment**	417,414	(3,442)	413,972	44,052	(3,442)
29							
30		**Transmission and Distribution**					
31	340.00	Land and Land Rights	225	-	225	-	-
32	341.00	Structures and Improvements	-	-	-	-	-
33	342.00	Distribution, Reservoirs, & ST	2,861,570	(34,414)	2,827,156	(3,199)	(34,414)
34	343.00	Transmission and Distribution	21,390,029	(7,710)	21,382,319	1,577,034	(7,710)
35	344.00	Fire Mains	-	-	-	-	-
36	345.00	Services	2,694,166	-	2,694,166	258,328	-
37	346.00	Meters	1,744,305	-	1,744,305	126,715	-
38	348.00	Hydrants	2,799,956	-	2,799,956	213,717	-
39	349.00	Other Transmission & Distribution	-	-	-	-	-
40		**Subtotal Trans & Dist**	31,490,251	(42,124)	31,448,127	2,172,595	(42,124)
41							
42		**General**					
43	389.00	Land and Land Rights	-	-	-	-	-
44	390.00	Structures and Improvements	98,201	-	98,201	7,979	-
45	391.00	Office Funiture and Equipment	85,784	-	85,784	11,659	-
46	391.10	Computer Equipment	61,885	-	61,885	5,294	-
47	392.00	Transportation Equipment	289,554	-	289,554	199,890	-
48	393.00	Stores Equipment	-	-	-	-	-
49	394.00	Tools, Shop and Garage	3,677	-	3,677	743	-
50	395.00	Laboratory Equipment	-	-	-	-	-
51	396.00	Power Operated Equipment	-	-	-	-	-
52	397.00	Communication Equipment	3,801	-	3,801	3,867	-
53	398.00	Miscellaneous Equipment	58,572	-	58,572	20,517	-
54		**Subtotal General**	601,473	-	601,473	249,949	-
55							
		TOTAL WATER PLANT	53,321,381	(76,503)	53,244,878	4,520,311	(71,884)

Arizona-American Agua Fria Water
B-3 Adjustments

Exhibit B-4
Page A2
Witness: Bourassa
(B-3, page 2b, Adj. #9)

Line No.	Account No.	Description	O.C. Adjusted A/D	RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted RCN	Adjustment RCN Direct to RCN Rebuttal	Adjusted RCN Rebuttal
1		**Intangible**						
2	301.00	Organization	-	3,247	-	3,247	(2,018)	1,229
3	302.00	Franchises	-	137,066	-	137,066	(58,179)	78,887
4	303.00	Miscellaneous Intangibles	-	127,581	-	127,581	(12,317)	115,264
5		**Subtotal Intangible**	-	267,894	-	267,894	(72,515)	195,380
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	-	278,216	-	278,216	(60,534)	217,682
9	311.00	Structures and Improvements	43,705	1,251,140	-	1,251,140	(20,369)	1,230,771
10	312.00	Collecting and Impounding Res.	-	-	-	-	-	-
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	284,050	3,823,335	-	3,823,335	(117,507)	3,705,828
13		**Subtotal Source of Supply**	327,755	5,352,691	-	5,352,691	(198,410)	5,154,282
14								
15		**Pumping**						
16	320.00	Land and Land Rights	-	55,756	(5,459)	50,298	(2,617)	47,681
17	321.00	Structures and Improvements	32,654	1,373,902	(17,945)	1,355,957	(7,989)	1,347,968
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	1,647,880	16,152,870	(19,044)	16,133,826	(299,511)	15,834,316
20	326.00	Diesel Pumping Equipment	18,816	39,034	-	39,034	6,683	45,717
21	328.10	Gas Engine Pumping Equipment	292	913	-	913	80	993
22		**Subtotal Pumping**	1,699,642	17,622,475	(42,447)	17,580,027	(303,353)	17,276,675
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	-	-	-	-	-	-
26	331.00	Structures and Improvements	-	51,378	-	51,378	(838)	50,540
27	332.00	Water Treatment Equipment	40,610	425,278	(4,795)	420,483	(6,734)	413,750
28		**Subtotal Water Treatment**	40,610	476,656	(4,795)	471,861	(7,572)	464,290
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	-	387	-	387	(162)	225
32	341.00	Structures and Improvements	-	-	-	-	-	-
33	342.00	Distribution, Reservoirs, & ST	(37,613)	3,117,675	(48,781)	3,068,894	(43,290)	3,025,603
34	343.00	Transmission and Distribution	1,569,324	25,274,148	(12,358)	25,261,791	(1,645,445)	23,616,346
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	258,328	3,164,188	-	3,164,188	(185,126)	2,979,062
37	346.00	Meters	126,715	1,946,770	-	1,946,770	(72,717)	1,874,053
38	348.00	Hydrants	213,717	3,229,305	-	3,229,305	121,646	3,350,951
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Trans & Dist**	2,130,471	36,732,473	(61,138)	36,671,334	(1,825,094)	34,846,240
41								
42		**General**					**(Common Plant, B-2, Page 6)**	
43	389.00	Land and Land Rights	-	-	-	-	-	-
44	390.00	Structures and Improvements	7,979	112,646	-	112,646	(3,192)	109,454
45	391.00	Office Funiture and Equipment	11,659	97,546	-	97,546	(2,019)	95,527
46	391.10	Computer Equipment	5,294	66,019	-	66,019	(556)	65,463
47	392.00	Transportation Equipment	199,890	313,808	-	313,808	(4,372)	309,435
48	393.00	Stores Equipment	-	-	-	-	-	-
49	394.00	Tools, Shop and Garage	743	4,299	-	4,299	(94)	4,205
50	395.00	Laboratory Equipment	-	-	-	-	-	-
51	396.00	Power Operated Equipment	-	-	-	-	-	-
52	397.00	Communication Equipment	3,867	5,299	-	5,299	3	5,302
53	398.00	Miscellaneous Equipment	20,517	73,031	-	73,031	(609)	72,422
54		**Subtotal General**	249,949	672,648	-	672,648	(10,839)	661,809
55								
		TOTAL WATER PLANT	4,448,427	61,124,837	(108,381)	61,016,457	(2,417,782)	58,598,675

Arizona-American Agua Fria Water
B-3 Adjustments

Exhibit B-4
Page A3
Witness: Bourassa

Line No.	Account No.	Description	A/D RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted A/D RCN Rebuttal	Ratio	A/D RCN Rebttual	(B-3, page 3b, Adj. #9) A/D Adjustment Adjusted RCN Direct to RCN Rebuttal
1		**Intangible**						
2	301.00	Organization	-	-	-	1.0000	-	-
3	302.00	Franchises	-	-	-	1.0000	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	1.0000	-	-
5		**Subtotal Intangible**	-	-	-		-	-
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	-	-	-	1.0000	-	-
9	311.00	Structures and Improvements	47,791	-	47,791	1.0757	47,013	(778)
10	312.00	Collecting and Impounding Res.	-	-	-	-	-	-
11	313.00	Lakes, Rivers, Other Intakes	-	-	-	-	-	-
12	314.00	Wells and Springs	315,867	-	315,867	1.0778	306,159	(9,708)
13		**Subtotal Source of Supply**	363,659	-	363,659		353,173	(10,486)
14								
15		**Pumping**				-	-	-
16	320.00	Land and Land Rights	-	-	-	1.1073	-	-
17	321.00	Structures and Improvements	48,322	(17,945)	30,377	1.0910	35,625	5,248
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	1,853,095	(19,044)	1,834,052	1.0935	1,801,911	(32,140)
20	326.00	Diesel Pumping Equipment	28,468	-	28,468	1.7720	33,343	4,874
21	328.10	Gas Engine Pumping Equipment	383	-	383	1.4254	417	34
22		**Subtotal Pumping**	1,930,269	(36,989)	1,893,280		1,871,296	(21,985)
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	-	-	-	-	-	-
26	331.00	Structures and Improvements	-	-	-	1.2661	-	-
27	332.00	Water Treatment Equipment	49,627	(4,795)	44,833	1.1061	44,919	86
28		**Subtotal Water Treatment**	49,627	(4,795)	44,833		44,919	86
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	-	-	-	1.0000	-	-
32	341.00	Structures and Improvements	-	-	-	-	-	-
33	342.00	Distribution, Reservoirs, & ST	(3,486)	(48,781)	(52,266)	1.0702	(40,254)	12,013
34	343.00	Transmission and Distribution	1,863,400	(12,358)	1,851,043	1.1045	1,733,287	(117,756)
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	303,396	-	303,396	1.1057	285,645	(17,751)
37	346.00	Meters	141,423	-	141,423	1.0744	136,141	(5,283)
38	348.00	Hydrants	246,488	-	246,488	1.1968	255,773	9,285
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Trans & Dist**	2,551,222	(61,138)	2,490,084		2,370,593	(119,491)
41								
42		**General**						**(Common Plant, B-2, Page 7)**
43	389.00	Land and Land Rights	-	-	-	-	-	-
44	390.00	Structures and Improvements	9,153	-	9,153	1.1146	8,894	(259)
45	391.00	Office Funiture and Equipment	13,258	-	13,258	1.1136	12,983	(274)
46	391.10	Computer Equipment	5,648	-	5,648	1.0578	5,600	(48)
47	392.00	Transportation Equipment	216,633	-	216,633	1.0687	213,615	(3,018)
48	393.00	Stores Equipment	-	-	-	-	-	-
49	394.00	Tools, Shop and Garage	869	-	869	1.1437	850	(19)
50	395.00	Laboratory Equipment	-	-	-	-	-	-
51	396.00	Power Operated Equipment	-	-	-	-	-	-
52	397.00	Communication Equipment	5,390	-	5,390	1.3948	5,393	3
53	398.00	Miscellaneous Equipment	25,582	-	25,582	1.2365	25,368	(213)
54		**Subtotal General**	276,532	-	276,532		272,704	(3,829)
55								
		TOTAL WATER PLANT	5,171,310	(102,922)	5,068,388		4,912,684	(155,704)

Company Code: 4006 Business Area: 4508 Agua Fria

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W30100	ORGANIZATION	1975	870	180.2	52.6	3.4259	2,980	870
W30100	ORGANIZATION	1976	359	180.2	55.8	3.2294	1,159	359
	W30100	Class Totals	1,229				4,139	1,229
W30200	FRANCH/CONSENTS	1975	29,169	180.2	52.6	3.4259	99,930	29,169
W30200	FRANCH/CONSENTS	1993	1,675	180.2	145.5	1.2385	2,074	1,675
W30200	FRANCH/CONSENTS	1995	47,790	180.2	152.2	1.1840	56,583	47,790
W30200	FRANCH/CONSENTS	1996	252	180.2	156.6	1.1507	290	252
	W30200	Class Totals	78,886				158,879	78,886
W30300	MISC INTANG PLNT	1997	49,169	180.2	160.6	1.1220	55,168	49,169
W30300	MISC INTANG PLNT	1998	991	180.2	163.6	1.1015	1,091	991
W30300	MISC INTANG PLNT	1999	47,684	180.2	167.8	1.0739	51,208	47,684
W30300	MISC INTANG PLNT	2001	17,418	180.2	180.2	1.0000	17,418	17,418
	W30300	Class Totals	115,263				124,887	115,263
W31000	LAND/LAND RIGHTS	1982	27,046	180.2	97.4	1.8501	50,037	27,046
W31000	LAND/LAND RIGHTS	1989	39,943	180.2	123.3	1.4615	58,377	39,943
W31000	LAND/LAND RIGHTS	1995	83,494	180.2	152.2	1.1840	98,857	83,494
W31000	LAND/LAND RIGHTS	1996	395	180.2	156.6	1.1507	455	395
W31000	LAND/LAND RIGHTS	1998	66,802	180.2	163.6	1.1015	73,583	66,802

	W31000	Class Totals	217,682				281,311	217,682
W31100	STRUCT AND IMPROV	1981	55	350.0	220.0	1.5909	87	87
W31100	STRUCT AND IMPROV	1982	3,133	350.0	226.0	1.5487	4,852	4,852
W31100	STRUCT AND IMPROV	1987	3,264	350.0	249.0	1.4056	4,588	4,588
W31100	STRUCT AND IMPROV	1989	1,114	350.0	250.0	1.4000	1,559	1,559
W31100	STRUCT AND IMPROV	1991	7,060	350.0	260.0	1.3462	9,504	9,504
W31100	STRUCT AND IMPROV	1992	1,094	350.0	259.0	1.3514	1,479	1,479
W31100	STRUCT AND IMPROV	1994	2,225	350.0	286.0	1.2238	2,723	2,723
W31100	STRUCT AND IMPROV	1996	135,251	350.0	303.0	1.1551	156,229	156,229
W31100	STRUCT AND IMPROV	1996	5,082	350.0	308.0	1.1364	5,776	5,776
W31100	STRUCT AND IMPROV	1997	102,881	350.0	314.0	1.1146	114,671	114,671
W31100	STRUCT AND IMPROV	1998	211,209	350.0	318.0	1.1006	232,457	232,457
W31100	STRUCT AND IMPROV	2000	358,595	350.0	329.0	1.0638	381,473	381,473
W31100	STRUCT AND IMPROV	2000	61,091	350.0	338.0	1.0355	63,260	63,260
W31100	STRUCT AND IMPROV	2001	252,107	350.0	350.0	1.0000	252,107	252,107
	W31100	Class Totals	1,144,167				1,230,771	1,230,771
W31400	WELLS AND SPRINGS	1982	51,549	321.0	216.0	1.4861	76,606	76,606
W31400	WELLS AND SPRINGS	1987	153,010	321.0	240.0	1.3375	204,651	204,651
W31400	WELLS AND SPRINGS	1989	134,931	321.0	246.0	1.3049	176,072	176,072
W31400	WELLS AND SPRINGS	1992	43,299	321.0	239.0	1.3431	58,154	58,154
W31400	WELLS AND SPRINGS	1992	1	321.0	246.0	1.3049	1	1
W31400	WELLS AND SPRINGS	1994	5,806	321.0	272.0	1.1801	6,852	6,852
W31400	WELLS AND SPRINGS	1995	471	321.0	274.0	1.1715	551	551
W31400	WELLS AND SPRINGS	1996	513,495	321.0	281.0	1.1423	586,565	586,565
W31400	WELLS AND SPRINGS	1996	85	321.0	288.0	1.1146	94	94

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			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W31400	WELLS AND SPRINGS		1997	2,687	321.0	291.0	1.1031	2,964	2,964
W31400	WELLS AND SPRINGS		1997	327,456	321.0	296.0	1.0845	355,126	355,126
W31400	WELLS AND SPRINGS		1998	899	321.0	298.0	1.0772	968	968
W31400	WELLS AND SPRINGS		1998	491,964	321.0	301.0	1.0664	524,630	524,630
W31400	WELLS AND SPRINGS		1999	516	321.0	305.0	1.0525	544	544
W31400	WELLS AND SPRINGS		2001	1,712,040	321.0	321.0	1.0000	1,712,040	1,712,040
		W31400	Class Totals	3,438,215				3,705,828	3,705,828
W32000	LAND/LAND RIGHTS		1989	10,102	180.2	123.3	1.4615	14,764	10,102
W32000	LAND/LAND RIGHTS		1997	27,909	180.2	160.6	1.1220	31,314	27,909
W32000	LAND/LAND RIGHTS		2001	9,668	180.2	180.2	1.0000	9,668	9,668
		W32000	Class Totals	47,680				55,747	47,680
W32100	STRUCT AND IMPROV		1972	885	350.0	93.0	3.7634	3,330	3,330
W32100	STRUCT AND IMPROV		1973	614	350.0	100.0	3.5000	2,149	2,149
W32100	STRUCT AND IMPROV		1984	1,078	350.0	238.0	1.4706	1,585	1,585
W32100	STRUCT AND IMPROV		1985	38,097	350.0	241.0	1.4523	55,328	55,328
W32100	STRUCT AND IMPROV		1987	548	350.0	249.0	1.4056	770	770
W32100	STRUCT AND IMPROV		1989	4,650	350.0	250.0	1.4000	6,510	6,510
W32100	STRUCT AND IMPROV		1994	2,813	350.0	286.0	1.2238	3,442	3,442
W32100	STRUCT AND IMPROV		1995	232	350.0	296.0	1.1824	274	274
W32100	STRUCT AND IMPROV		1997	423,106	350.0	314.0	1.1146	471,594	471,594
W32100	STRUCT AND IMPROV		1999	2,545	350.0	324.0	1.0802	2,750	2,750
W32100	STRUCT AND IMPROV		2000	439,920	350.0	329.0	1.0638	467,986	467,986

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		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W32100	STRUCT AND IMPROV	2001	332,244	350.0	350.0	1.0000	332,244	332,244
	W32100	Class Totals	1,246,735				1,347,967	1,347,967
W32500	ELEC PUMP EQUIP	1972	5,012	531.0	96.0	5.5313	27,722	27,722
W32500	ELEC PUMP EQUIP	1973	8,790	531.0	100.0	5.3100	46,674	46,674
W32500	ELEC PUMP EQUIP	1976	1,444	531.0	174.0	3.0517	4,406	4,406
W32500	ELEC PUMP EQUIP	1978	4,491	531.0	192.0	2.7656	12,420	12,420
W32500	ELEC PUMP EQUIP	1979	210	531.0	205.0	2.5902	543	543
W32500	ELEC PUMP EQUIP	1982	48,835	531.0	260.0	2.0423	99,735	99,735
W32500	ELEC PUMP EQUIP	1983	18,841	531.0	271.0	1.9594	36,917	36,917
W32500	ELEC PUMP EQUIP	1984	207,998	531.0	277.0	1.9170	398,732	398,732
W32500	ELEC PUMP EQUIP	1985	156,926	531.0	282.0	1.8830	295,491	295,491
W32500	ELEC PUMP EQUIP	1986	927	531.0	284.0	1.8697	1,733	1,733
W32500	ELEC PUMP EQUIP	1987	59,969	531.0	299.0	1.7759	106,499	106,499
W32500	ELEC PUMP EQUIP	1988	2,639	531.0	303.0	1.7525	4,625	4,625
W32500	ELEC PUMP EQUIP	1989	228,882	531.0	336.0	1.5804	361,725	361,725
W32500	ELEC PUMP EQUIP	1990	51,752	531.0	349.0	1.5215	78,740	78,740
W32500	ELEC PUMP EQUIP	1991	53,803	531.0	357.0	1.4874	80,026	80,026
W32500	ELEC PUMP EQUIP	1991	23,025	531.0	350.0	1.5171	34,931	34,931
W32500	ELEC PUMP EQUIP	1992	46,835	531.0	363.0	1.4628	68,511	68,511
W32500	ELEC PUMP EQUIP	1993	7,966	531.0	369.0	1.4390	11,463	11,463
W32500	ELEC PUMP EQUIP	1993	2,211	531.0	378.0	1.4048	3,106	3,106
W32500	ELEC PUMP EQUIP	1994	3,027	531.0	420.0	1.2643	3,827	3,827
W32500	ELEC PUMP EQUIP	1994	63,563	531.0	426.0	1.2465	79,231	79,231
W32500	ELEC PUMP EQUIP	1995	6,146	531.0	438.0	1.2123	7,451	7,451

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W32500	ELEC PUMP EQUIP		1995	12,639	531.0	437.0	1.2151	15,357	15,357
W32500	ELEC PUMP EQUIP		1996	348,417	531.0	454.0	1.1696	407,509	407,509
W32500	ELEC PUMP EQUIP		1996	56,575	531.0	446.0	1.1906	67,358	67,358
W32500	ELEC PUMP EQUIP		1997	3,438	531.0	454.0	1.1696	4,022	4,022
W32500	ELEC PUMP EQUIP		1997	2,567,625	531.0	476.0	1.1155	2,864,186	2,864,186
W32500	ELEC PUMP EQUIP		1998	18,518	531.0	485.0	1.0948	20,274	20,274
W32500	ELEC PUMP EQUIP		1998	912,900	531.0	486.0	1.0926	997,434	997,434
W32500	ELEC PUMP EQUIP		1999	531	531.0	499.0	1.0641	565	565
W32500	ELEC PUMP EQUIP		1999	339,769	531.0	499.0	1.0641	361,549	361,549
W32500	ELEC PUMP EQUIP		2000	6,503,916	531.0	523.0	1.0153	6,603,425	6,603,425
W32500	ELEC PUMP EQUIP		2000	76,237	531.0	532.0	0.9981	76,092	76,092
W32500	ELEC PUMP EQUIP		2001	2,652,020	531.0	531.0	1.0000	2,652,020	2,652,020
		W32500	Class Totals	14,495,885				15,834,315	15,834,315
W32600	DIESEL PUMP EQUIP		1981	10,745	531.0	245.0	2.1673	23,287	23,287
W32600	DIESEL PUMP EQUIP		1989	11,225	531.0	336.0	1.5804	17,740	17,740
W32600	DIESEL PUMP EQUIP		1990	598	531.0	349.0	1.5215	911	911
W32600	DIESEL PUMP EQUIP		1996	3,230	531.0	454.0	1.1696	3,778	3,778
		W32600	Class Totals	25,799				45,717	45,717
W32800	OTHER PUMP EQUIP		1993	642	531.0	369.0	1.4390	924	924
W32800	OTHER PUMP EQUIP		1994	54	531.0	420.0	1.2643	68	68

	W32800	Class Totals	696				993	993
W33100	WATER TREAT EQUIP STRUCT &	1989	13,529	350.0	250.0	1.4000	18,941	18,941
W33100	WATER TREAT EQUIP STRUCT &	1990	6,332	350.0	259.0	1.3514	8,557	8,557
W33100	WATER TREAT EQUIP STRUCT &	1990	159	350.0	262.0	1.3359	212	212
W33100	WATER TREAT EQUIP STRUCT &	1993	4,009	350.0	274.0	1.2774	5,121	5,121
W33100	WATER TREAT EQUIP STRUCT &	1997	15,885	350.0	314.0	1.1146	17,706	17,706
	W33100	Class Totals	39,916				50,539	50,539
W33200	WATER TREAT EQUIP	1989	14,915	403.0	309.0	1.3042	19,452	19,452
W33200	WATER TREAT EQUIP	1990	6,582	403.0	311.0	1.2958	8,529	8,529
W33200	WATER TREAT EQUIP	1990	238	403.0	314.0	1.2834	306	306
W33200	WATER TREAT EQUIP	1993	3,411	403.0	327.0	1.2324	4,204	4,204
W33200	WATER TREAT EQUIP	1994	1,642	403.0	334.0	1.2066	1,981	1,981
W33200	WATER TREAT EQUIP	1995	49	403.0	337.0	1.1958	59	59
W33200	WATER TREAT EQUIP	1995	361	403.0	335.0	1.2030	434	434
W33200	WATER TREAT EQUIP	1996	11,235	403.0	342.0	1.1784	13,240	13,240
W33200	WATER TREAT EQUIP	1997	137,170	403.0	360.0	1.1194	153,548	153,548
W33200	WATER TREAT EQUIP	1998	59,544	403.0	370.0	1.0892	64,855	64,855
W33200	WATER TREAT EQUIP	2000	94,911	403.0	384.0	1.0495	99,609	99,609
W33200	WATER TREAT EQUIP	2000	2,806	403.0	390.0	1.0333	2,900	2,900
W33200	WATER TREAT EQUIP	2001	44,626	403.0	403.0	1.0000	44,626	44,626
	W33200	Class Totals	377,497				413,749	413,749
W34000	LAND/LAND RIGHTS	1982	225	180.2	97.4	1.8501	416	225

	W34000	Class Totals	225				416	225
W34200	DIST RESRV & STNDPIP	1972	5,044	275.0	85.0	3.2353	16,318	16,318
W34200	DIST RESRV & STNDPIP	1987	228	275.0	196.0	1.4031	319	319
W34200	DIST RESRV & STNDPIP	1988	4,694	275.0	215.0	1.2791	6,004	6,004
W34200	DIST RESRV & STNDPIP	1989	237,364	275.0	209.0	1.3158	312,323	312,323
W34200	DIST RESRV & STNDPIP	1990	647	275.0	232.0	1.1853	766	766
W34200	DIST RESRV & STNDPIP	1991	14	275.0	232.0	1.1853	16	16
W34200	DIST RESRV & STNDPIP	1994	1,959	275.0	246.0	1.1179	2,190	2,190
W34200	DIST RESRV & STNDPIP	1997	476,840	275.0	251.0	1.0956	522,426	522,426
W34200	DIST RESRV & STNDPIP	1998	16,208	275.0	268.0	1.0261	16,631	16,631
W34200	DIST RESRV & STNDPIP	2000	486,188	275.0	268.0	1.0261	498,878	498,878
W34200	DIST RESRV & STNDPIP	2000	937,539	275.0	270.0	1.0185	954,884	954,884
W34200	DIST RESRV & STNDPIP	2001	694,842	275.0	275.0	1.0000	694,842	694,842
	W34200	Class Totals	2,861,570				3,025,603	3,025,603
W34300	TRANS/DISTR	1964	3,766	324.0	78.0	4.1538	15,643	15,643
W34300	TRANS/DISTR	1972	26,574	324.0	98.0	3.3061	87,859	87,859
W34300	TRANS/DISTR	1973	87,149	324.0	100.0	3.2400	282,362	282,362
W34300	TRANS/DISTR	1977	9,957	324.0	166.0	1.9518	19,434	19,434
W34300	TRANS/DISTR	1979	9,587	324.0	193.0	1.6788	16,094	16,094
W34300	TRANS/DISTR	1980	181,191	324.0	209.0	1.5502	280,882	280,882
W34300	TRANS/DISTR	1981	145,085	324.0	224.0	1.4464	209,850	209,850
W34300	TRANS/DISTR	1982	459,535	324.0	239.0	1.3556	622,945	622,945
W34300	TRANS/DISTR	1983	1,604	324.0	246.0	1.3171	2,112	2,112
W34300	TRANS/DISTR	1984	64,244	324.0	244.0	1.3279	85,309	85,309
W34300	TRANS/DISTR	1985	4,283	324.0	248.0	1.3065	5,595	5,595

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W34300	TRANS/DISTR	1986	14,857	324.0	245.0	1.3224	19,646	19,646
W34300	TRANS/DISTR	1987	21,845	324.0	252.0	1.2857	28,086	28,086
W34300	TRANS/DISTR	1988	39,273	324.0	255.0	1.2706	49,900	49,900
W34300	TRANS/DISTR	1989	68,443	324.0	269.0	1.2045	82,440	82,440
W34300	TRANS/DISTR	1989	1,596,504	324.0	273.0	1.1868	1,894,732	1,894,732
W34300	TRANS/DISTR	1990	23,119	324.0	273.0	1.1868	27,437	27,437
W34300	TRANS/DISTR	1990	286,306	324.0	275.0	1.1782	337,325	337,325
W34300	TRANS/DISTR	1991	29,351	324.0	277.0	1.1697	34,331	34,331
W34300	TRANS/DISTR	1991	88,900	324.0	279.0	1.1613	103,240	103,240
W34300	TRANS/DISTR	1992	8,344	324.0	274.0	1.1825	9,866	9,866
W34300	TRANS/DISTR	1992	44,164	324.0	277.0	1.1697	51,658	51,658
W34300	TRANS/DISTR	1993	12,938	324.0	281.0	1.1530	14,918	14,918
W34300	TRANS/DISTR	1993	238,701	324.0	285.0	1.1368	271,356	271,356
W34300	TRANS/DISTR	1994	104,454	324.0	291.0	1.1134	116,300	116,300
W34300	TRANS/DISTR	1994	387,336	324.0	289.0	1.1211	434,242	434,242
W34300	TRANS/DISTR	1995	111,265	324.0	291.0	1.1134	123,882	123,882
W34300	TRANS/DISTR	1995	2,761	324.0	286.0	1.1329	3,129	3,129
W34300	TRANS/DISTR	1996	463,066	324.0	289.0	1.1211	519,143	519,143
W34300	TRANS/DISTR	1996	172,751	324.0	292.0	1.1096	191,685	191,685
W34300	TRANS/DISTR	1997	34,332	324.0	297.0	1.0909	37,453	37,453
W34300	TRANS/DISTR	1997	6,717,684	324.0	299.0	1.0836	7,279,283	7,279,283
W34300	TRANS/DISTR	1998	1,083,529	324.0	301.0	1.0764	1,166,311	1,166,311
W34300	TRANS/DISTR	1998	1,187,063	324.0	300.0	1.0800	1,282,028	1,282,028
W34300	TRANS/DISTR	1999	683,931	324.0	313.0	1.0351	707,937	707,937
W34300	TRANS/DISTR	1999	2,609,785	324.0	306.0	1.0588	2,763,241	2,763,241
W34300	TRANS/DISTR	2000	1,965,118	324.0	316.0	1.0253	2,014,836	2,014,836
W34300	TRANS/DISTR	2001	1,809,410	324.0	320.0	1.0125	1,832,028	1,832,028

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W34300	TRANS/DISTR	2001	591,811	324.0	324.0	1.0000	591,811	591,811
	W34300 Class Totals		21,390,029				23,616,346	23,616,346
W34500	SERVICES	1972	3,373	288.0	92.0	3.1304	10,558	10,558
W34500	SERVICES	1973	1,718	288.0	100.0	2.8800	4,947	4,947
W34500	SERVICES	1976	881	288.0	129.0	2.2326	1,966	1,966
W34500	SERVICES	1977	135	288.0	142.0	2.0282	273	273
W34500	SERVICES	1978	776	288.0	150.0	1.9200	1,489	1,489
W34500	SERVICES	1980	8,208	288.0	181.0	1.5912	13,060	13,060
W34500	SERVICES	1981	1,006	288.0	192.0	1.5000	1,509	1,509
W34500	SERVICES	1982	2,592	288.0	198.0	1.4545	3,770	3,770
W34500	SERVICES	1983	30,506	288.0	207.0	1.3913	42,443	42,443
W34500	SERVICES	1984	19,355	288.0	211.0	1.3649	26,417	26,417
W34500	SERVICES	1985	23,897	288.0	211.0	1.3649	32,617	32,617
W34500	SERVICES	1986	25,067	288.0	222.0	1.2973	32,519	32,519
W34500	SERVICES	1987	29,347	288.0	227.0	1.2687	37,233	37,233
W34500	SERVICES	1988	15,177	288.0	228.0	1.2632	19,171	19,171
W34500	SERVICES	1988	16,907	288.0	230.0	1.2522	21,171	21,171
W34500	SERVICES	1989	743	288.0	221.0	1.3032	968	968
W34500	SERVICES	1989	78,055	288.0	224.0	1.2857	100,356	100,356
W34500	SERVICES	1990	16,673	288.0	226.0	1.2743	21,246	21,246
W34500	SERVICES	1990	4,325	288.0	228.0	1.2632	5,463	5,463
W34500	SERVICES	1991	15,408	288.0	235.0	1.2255	18,882	18,882
W34500	SERVICES	1991	27,598	288.0	236.0	1.2203	33,678	33,678
W34500	SERVICES	1992	29,014	288.0	241.0	1.1950	34,671	34,671

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W34500	SERVICES		1992	19,843	288.0	251.0	1.1474	22,767	22,767
W34500	SERVICES		1993	24,111	288.0	251.0	1.1474	27,665	27,665
W34500	SERVICES		1993	48,914	288.0	249.0	1.1566	56,574	56,574
W34500	SERVICES		1994	62,455	288.0	265.0	1.0868	67,876	67,876
W34500	SERVICES		1994	32,784	288.0	250.0	1.1520	37,767	37,767
W34500	SERVICES		1995	11,693	288.0	253.0	1.1383	13,310	13,310
W34500	SERVICES		1995	78,791	288.0	255.0	1.1294	88,986	88,986
W34500	SERVICES		1996	64,207	288.0	263.0	1.0951	70,313	70,313
W34500	SERVICES		1996	104,005	288.0	262.0	1.0992	114,323	114,323
W34500	SERVICES		1997	5,902	288.0	263.0	1.0951	6,464	6,464
W34500	SERVICES		1997	654,526	288.0	266.0	1.0827	708,656	708,656
W34500	SERVICES		1998	156,934	288.0	268.0	1.0746	168,641	168,641
W34500	SERVICES		1998	199,149	288.0	261.0	1.1034	219,741	219,741
W34500	SERVICES		1999	239,264	288.0	271.0	1.0627	254,266	254,266
W34500	SERVICES		1999	166,103	288.0	274.0	1.0511	174,591	174,591
W34500	SERVICES		2000	198,605	288.0	278.0	1.0360	205,754	205,754
W34500	SERVICES		2001	79,243	288.0	285.0	1.0105	80,075	80,075
W34500	SERVICES		2001	196,865	288.0	288.0	1.0000	196,865	196,865
		W34500	Class Totals	2,694,166				2,979,062	2,979,062
W34600	METERS		1973	68	350.0	100.0	3.5000	238	238
W34600	METERS		1974	181	350.0	118.0	2.9661	536	536
W34600	METERS		1975	45	350.0	129.0	2.7132	122	122
W34600	METERS		1976	192	350.0	137.0	2.5547	490	490
W34600	METERS		1981	628	350.0	202.0	1.7327	1,088	1,088

Company Code: 4006 Business Area: 4508 Agua Fria

		Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34600	METERS	1982	679	350.0	219.0	1.5982	1,085	1,085
W34600	METERS	1983	1,509	350.0	235.0	1.4894	2,247	2,247
W34600	METERS	1984	860	350.0	241.0	1.4523	1,248	1,248
W34600	METERS	1985	2,706	350.0	239.0	1.4644	3,962	3,962
W34600	METERS	1986	1,746	350.0	248.0	1.4113	2,464	2,464
W34600	METERS	1987	2,700	350.0	253.0	1.3834	3,736	3,736
W34600	METERS	1988	288	350.0	256.0	1.3672	394	394
W34600	METERS	1989	1,471	350.0	257.0	1.3619	2,003	2,003
W34600	METERS	1989	9,568	350.0	261.0	1.3410	12,830	12,830
W34600	METERS	1990	698	350.0	262.0	1.3359	932	932
W34600	METERS	1990	446	350.0	264.0	1.3258	592	592
W34600	METERS	1992	1,729	350.0	278.0	1.2590	2,176	2,176
W34600	METERS	1992	14,407	350.0	283.0	1.2367	17,818	17,818
W34600	METERS	1993	439	350.0	292.0	1.1986	526	526
W34600	METERS	1993	32,936	350.0	295.0	1.1864	39,075	39,075
W34600	METERS	1994	21,734	350.0	297.0	1.1785	25,613	25,613
W34600	METERS	1995	2,848	350.0	303.0	1.1551	3,290	3,290
W34600	METERS	1995	20,500	350.0	303.0	1.1551	23,680	23,680
W34600	METERS	1996	29,625	350.0	316.0	1.1076	32,813	32,813
W34600	METERS	1996	22,020	350.0	318.0	1.1006	24,235	24,235
W34600	METERS	1997	3,012	350.0	318.0	1.1006	3,315	3,315
W34600	METERS	1997	448,980	350.0	322.0	1.0870	488,041	488,041
W34600	METERS	1998	69,638	350.0	325.0	1.0769	74,993	74,993
W34600	METERS	1998	256,999	350.0	322.0	1.0870	279,358	279,358
W34600	METERS	1999	124,137	350.0	329.0	1.0638	132,057	132,057
W34600	METERS	1999	261,355	350.0	332.0	1.0542	275,521	275,521
W34600	METERS	2000	222,031	350.0	339.0	1.0324	229,225	229,225

Company Code: 4006 Business Area: 4508 Agua Fria

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34600	METERS		2001	37,680	350.0	348.0	1.0057	37,895	37,895
W34600	METERS		2001	150,440	350.0	350.0	1.0000	150,440	150,440
		W34600	Class Totals	1,744,304				1,874,052	1,874,052
W34800	HYDRANTS		1972	1,412	527.0	95.0	5.5474	7,832	7,832
W34800	HYDRANTS		1973	1,819	527.0	100.0	5.2700	9,586	9,586
W34800	HYDRANTS		1980	19,172	527.0	220.0	2.3955	45,928	45,928
W34800	HYDRANTS		1981	32,053	527.0	235.0	2.2426	71,882	71,882
W34800	HYDRANTS		1982	38,002	527.0	260.0	2.0269	77,026	77,026
W34800	HYDRANTS		1984	14,309	527.0	280.0	1.8821	26,930	26,930
W34800	HYDRANTS		1989	9,400	527.0	328.0	1.6067	15,103	15,103
W34800	HYDRANTS		1989	136,943	527.0	338.0	1.5592	213,521	213,521
W34800	HYDRANTS		1990	675	527.0	349.0	1.5100	1,020	1,020
W34800	HYDRANTS		1991	18,520	527.0	359.0	1.4680	27,188	27,188
W34800	HYDRANTS		1992	12,064	527.0	361.0	1.4598	17,611	17,611
W34800	HYDRANTS		1993	41,457	527.0	368.0	1.4321	59,371	59,371
W34800	HYDRANTS		1994	50,920	527.0	365.0	1.4438	73,519	73,519
W34800	HYDRANTS		1995	8,519	527.0	373.0	1.4129	12,036	12,036
W34800	HYDRANTS		1995	7,998	527.0	373.0	1.4129	11,300	11,300
W34800	HYDRANTS		1996	44,581	527.0	377.0	1.3979	62,320	62,320
W34800	HYDRANTS		1996	1,448	527.0	379.0	1.3905	2,013	2,013
W34800	HYDRANTS		1997	5,536	527.0	442.0	1.1923	6,601	6,601
W34800	HYDRANTS		1997	790,746	527.0	453.0	1.1634	919,954	919,954
W34800	HYDRANTS		1998	179,253	527.0	467.0	1.1285	202,287	202,287
W34800	HYDRANTS		1998	217,072	527.0	466.0	1.1309	245,487	245,487

Company Code: 4006 Business Area: 4508 Agua Fria

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34800	HYDRANTS		1999	277,510	527.0	482.0	1.0934	303,430	303,430
W34800	HYDRANTS		1999	265,460	527.0	484.0	1.0888	289,033	289,033
W34800	HYDRANTS		2000	306,498	527.0	498.0	1.0582	324,337	324,337
W34800	HYDRANTS		2001	302,351	527.0	515.0	1.0233	309,396	309,396
W34800	HYDRANTS		2001	16,225	527.0	527.0	1.0000	16,225	16,225
		W34800	Class Totals	2,799,955				3,350,950	3,350,950
W39000	MISC STRUCTURES		1997	98,200	350.0	314.0	1.1146	109,454	109,454
		W39000	Class Totals	98,200				109,454	109,454
W39100	OFFICE FURN/EQUIP		1997	79,015	180.2	160.6	1.1220	88,655	88,655
W39100	OFFICE FURN/EQUIP		1998	1,021	180.2	163.6	1.1015	1,125	1,125
W39100	OFFICE FURN/EQUIP		2001	5,746	180.2	180.2	1.0000	5,746	5,746
		W39100	Class Totals	85,783				95,527	95,527
W39110	COMPUTER EQUIPMENT		1997	23,162	180.2	160.6	1.1220	25,987	25,987
W39110	COMPUTER EQUIPMENT		1998	1,606	180.2	163.6	1.1015	1,769	1,769
W39110	COMPUTER EQUIPMENT		2000	14,371	180.2	173.1	1.0410	14,960	14,960
W39110	COMPUTER EQUIPMENT		2001	22,744	180.2	180.2	1.0000	22,744	22,744
		W39110	Class Totals	61,884				65,462	65,462

Company Code: 4006 Business Area: 4508 Agua Fria

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W39200	TRANSPORT EQUIP		1996	18,685	180.2	156.6	1.1507	21,501	21,501
W39200	TRANSPORT EQUIP		1997	74,102	180.2	160.6	1.1220	83,142	83,142
W39200	TRANSPORT EQUIP		1999	81,206	180.2	167.8	1.0739	87,207	87,207
W39200	TRANSPORT EQUIP		2000	49,353	180.2	173.1	1.0410	51,377	51,377
W39200	TRANSPORT EQUIP		2001	66,206	180.2	180.2	1.0000	66,206	66,206
		W39200	Class Totals	289,554				309,435	309,435
W39400	TOOLS AND WORK EQUIP		1985	120	180.2	108.0	1.6685	200	200
W39400	TOOLS AND WORK EQUIP		1995	1,055	180.2	152.2	1.1840	1,249	1,249
W39400	TOOLS AND WORK EQUIP		1998	2,501	180.2	163.6	1.1015	2,755	2,755
		W39400	Class Totals	3,676				4,205	4,205
W39700	COMM EQUIP		1987	42	180.2	113.2	1.5919	66	66
W39700	COMM EQUIP		1990	3,759	180.2	129.4	1.3926	5,235	5,235
		W39700	Class Totals	3,801				5,301	5,301
W39800	MISC EQUIP		1981	2,026	180.2	91.9	1.9608	3,972	3,972
W39800	MISC EQUIP		1987	5,759	180.2	113.2	1.5919	9,168	9,168
W39800	MISC EQUIP		1993	13,049	180.2	145.5	1.2385	16,161	16,161
W39800	MISC EQUIP		1996	35,716	180.2	156.6	1.1507	41,099	41,099
W39800	MISC EQUIP		2001	2,020	180.2	180.2	1.0000	2,020	2,020

	W39800	Class Totals	58,571	72,422	72,422
Company Code:	4006	Business Area: 4508	53,321,381	58,763,088	58,598,675

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 1
Witness: Bourassa

Line No.		Direct Test Year Book Results	Label	Adjustment	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	**Revenues**						
2	Metered Water Revenues	$ 5,846,076			$ 5,846,076	119,289	$ 5,965,365
3	Unmetered Water Revenues	-			-		-
4	Other Water Revenues	339,961			339,961		339,961
5		$ 6,186,037		$ -	$ 6,186,037	$ 119,289	$ 6,305,326
6	**Operating Expenses**						
7	Salaries and Wages	$ 632,324	1/6	(88,621)	$ 543,704		$ 543,704
8	Purchased Water	382,700			382,700		382,700
9	Purchased Power	601,814			601,814		601,814
10	Chemicals	10,523			10,523		10,523
11	Repairs and Maintenance	198,956			198,956		198,956
12	Office Supplies and Expense	164,777	7	(30,625)	134,152		134,152
13	Outside Services	35,465			35,465		35,465
14	Service Company Charges	713,274	10	(23,839)	689,434		689,434
15	Water Testing	8,614			8,614		8,614
16	Rents	25,841			25,841		25,841
17	Transportation Expenses	-			-		-
18	Insurance - General Liability	33,390	8	(1,418)	31,972		31,972
19	Insurance - Health and Life	-			-		-
20	Regulatory Commission Expense - Rate Case	43,906			43,906		43,906
21	Miscellaneous Expense	188,009	9	71	188,081		188,081
22	Depreciation Expense	1,187,079	3	(29,504)	1,157,575		1,157,575
23	Taxes Other Than Income	40,435	2	(6,398)	34,037		34,037
24	Property Taxes	315,444	4	(4,687)	310,758		310,758
25	Income Tax	387,708		96,133	483,841		529,885
26					-		-
27	**Total Operating Expenses**	$ 4,970,260		$ (88,888)	$ 4,881,371	$ -	$ 4,927,416
28	**Profit (Loss) Before Interest & Taxes**	$ 1,215,777		$ 88,888	$ 1,304,666	$ 119,289	$ 1,377,911
29	**Other Income (Expense)**						
30	Interest Income	-			-		-
31	Other income	-			-		-
32	Interest Expense	(599,031)	5	64,035	(534,996)		(534,996)
33	Other Expense	-			-		-
34	Gain/Loss Sale of Fixed Assets	-			-		-
35	**Total Other Income (Expense)**	$ (599,031)		$ 64,035	$ (534,996)	$ -	$ (534,996)
36	**Net Profit (Loss)**	$ 616,746		$ 152,923	$ 769,669	$ 119,289	$ 842,914
37							
38	SUPPORTING SCHEDULES:					RECAP SCHEDULES:	
39	Rebuttal C-2					Rebuttal A-1	
40							
41							

Arizona American
Summary of Rebuttal Adjustments
Test Year December 31, 2001

Exhibit
Rebuttal Schedule C-2
Witness: Bourassa
Page1

	Water/ Sewer Label	Description	Agua Fria Water
Revenues			
Revenues		None	
Other Revenues		None	
			$ -
Operating Expenses			
Salaries and Wages	1	Adjust to Actual 2002 Wages	$ (75,952)
	6	Adjust to Actual 2002 Additional (Corporate)	(12,669)
Purchased Water	11	Adjust to annualized 2001 qty ordered	
Purchased Wastewater Treatment		None	
Purchased Power		None	
Fuel for Power Production			
Chemicals		None	
Materials ans Supplies		None	
Repairs and Maintenance		None	
Office Supplies and Expense	7	Adjust to Actual 2002 Additional (Corporate)	(30,625)
Outside Services			
Service Company Charges	10	Adjust to Actual 2002 Service Company Charges	(23,839)
Water Testing		None	
Rents		None	
Transportation Expenses			
Insurance - General Liability	8	Adjust to Actual 2002 Additional (Corporate)	(1,418)
Insurance - Health and Life		None	
Rate Case Expense		None	
Miscellaneous Expense	9	Adjust to Actual 2002 Additional (Corporate)	71
Depreciation Expense	3	Depreciation Expense	(29,504)
Taxes Other Than Income	2	Adjust to 2002 PR Tax based on Actual Wages	(6,398)
Property Taxes	4	Property Taxes	(4,687)
Income Tax			96,133
Tolleson Wastewater User Fees		None	
Total Operating Expenses			$ (88,888)
Operating Income			$ 88,888

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line No.		Amount
1	Projected Salaries & Wages and Related Expenses	
2		
3	Actual 2002 Wages and Salaries	
4	0 Salaries & Wages	$ 430,190
5		
6	Direct Filing Proposed Wages and Salaries	
7	0 Salaries & Wages	506,142
8		
9	Increase (Decrease)	$ (75,952)
10		
11	Adjustment to Revenues and/or Expenses	$ (75,952)
12		
13		
14		
15		

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line No.		Amount
1	Projected Salaries & Wages and Related Expenses	
2		
3	PR Taxes Based on Actual 2002 Wages and Salaries	
4	# Taxes Other Than Income	34,037
5		
6	Direct Filing Proposed PR Taxes	
7	# Taxes Other Than Income	40,435
8		
9	Increase (Decrease)	$ (6,398)
10		
11	Adjustment to Revenues and/or Expenses	$ (6,398)
12		
13		
14		
15		

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
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Witness: Bourassa

Depreciation Expense

Line No.	Account No.	Description	Rebuttak Original Cost	Rate	Depreciation Expense
		Intangible			
	301.00	Organization	$ 1,229	0.00%	$ -
	302.00	Franchises	78,887	0.00%	-
	303.00	Miscellaneous Intangibles	115,264	0.00%	-
		Subtotal Intangible	$ 195,380		$ -
		Source of Supply			
	310.00	Land and Land Rights	$ 217,682	0.00%	$ -
	311.00	Structures and Improvements	1,200,703	2.50%	30,018
	312.00	Collecting and Impounding Res.	-	0.00%	-
	313.00	Lakes, Rivers, Other Intakes	-	0.00%	-
	314.00	Wells and Springs	4,052,408	2.52%	102,121
		Subtotal Source of Supply	$ 5,470,794		$ 132,138
		Pumping			
	320.00	Land and Land Rights	$ 43,062	0.00%	$ -
	321.00	Structures and Improvements	1,235,539	1.67%	20,634
	323.00	Other Power Production	-	0.00%	-
	325.00	Electric Pumping Equipment	14,614,341	4.42%	645,954
	326.00	Diesel Pumping Equipment	25,799	4.42%	1,140
	328.10	Gas Engine Pumping Equipment	697	4.42%	31
		Subtotal Pumping	$ 15,919,438		$ 667,759
		Water Treatment			
	330.00	Land and Land Rights	$ -	0.00%	$ -
	331.00	Structures and Improvements	39,917	1.67%	667
	332.00	Water Treatment Equipment	384,316	4.00%	15,373
		Subtotal Water Treatment	$ 424,232		$ 16,039
		Transmission and Distribution			
	340.00	Land and Land Rights	$ 225	0.00%	$ -
	341.00	Structures and Improvements	-	0.00%	-
	342.00	Distribution, Reservoirs, & ST	3,090,646	1.67%	51,614
	343.00	Transmission and Distribution	21,459,474	1.53%	328,330
	344.00	Fire Mains	-	0.00%	-
	345.00	Services	2,694,167	2.48%	66,815
	346.00	Meters	1,744,305	2.51%	43,782
	348.00	Hydrants	2,805,185	2.00%	56,104
	349.00	Other Transmission & Distribution	-	0.00%	-
		Subtotal Transmission and Distribution	$ 31,794,002		$ 546,645
		General			
	389.00	Land and Land Rights	$ 681	0.00%	$ -
	390.00	Structures and Improvements	467,707	1.68%	7,861
	391.00	Office Funiture and Equipment	230,305	4.55%	10,468
	391.10	Computer Equipment	187,706	4.55%	8,532
	392.00	Transportation Equipment	251,004	25.00%	62,751
	393.00	Stores Equipment	4,012	3.92%	157
	394.00	Tools, Shop and Garage	57,402	4.14%	2,374
	395.00	Laboratory Equipment	18,183	3.71%	675
	396.00	Power Operated Equipment	16,710	5.14%	860
	397.00	Communication Equipment	122,529	10.28%	12,593
	398.00	Miscellaneous Equipment	36,583	4.98%	1,822
		Subtotal General	$ 1,392,822		$ 108,091
		Double Booked Advance	(4,128,730)	2.88%	(118,901)
		TOTALS	$ 51,067,939	2.880%	$ 1,351,772
	Amortization of Deferred Regulatory Assets		$ 109,279	2.88%	3,147
	Less: Amotization of Contributions		$ 1,973,438	10.0000%	(197,344)
	Rebuttal Depreciation Expense				$ 1,157,575
	Direct Filing Depreciation Expense				1,187,079
	Increase (decrease) in Depreciation Expense				(29,504)
	Adjustment to Revenues and/or Expenses				$ (29,504)

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line No.		
1	Adjust Property Taxes to Reflect Proposed Revenues:	
2		
3	Rebuttal Adjusted Revenues in year ended 12/31/01	$ 6,186,037
4	Rebuttal Adjusted Revenues in year ended 12/31/01	6,186,037
5	Proposed Revenues	6,305,326
6	Average of three year's of revenue	$ 6,225,800
7	Average of three year's of revenue, times 2	12,451,600
8	Add:	
9	Construction Work in Progess at 10%	
10	Deduct:	
11	Book Value of Transportation Equipment	251,004
12	Book Value of Transportation Equipment (proforma)	-
13	Total Book Value of Transportation Equipment	$ 251,004
14		
15	Full Cash Value	$ 12,200,596
16	Assessment Ratio	25%
17	Assessed Value	3,050,149
18	Property Tax Rate	10.188273%
19		
20	Property Tax	310,758
21	Tax on Parcels	0
22		
23	Total Rebuttal Property Tax at Proposed Rates	$ 310,758
24	Direct Filing Proposed Property Taxes	315,444
25	Increase (Decrease) in Property Taxes	$ (4,687)
26		
27		
28	Adjustment to Revenues and/or Expenses	$ (4,687)
29		
30		

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line No.		
1	Interest Synchronization with Rate Base	
2		
3	Rebuttal Fair Value Rate Base	$18,346,919
4	Weigted Cost of Debt from Schedule D-1	2.92%
5	Rebuttal Synchronized Interest Expense	534,996
6	Direct Filing Interest Expense	599,031
7	Increase in Interest Expense	$ (64,035)
8		
9	Adjustment to Revenues and/or Expense	$ (64,035)
10		
11		

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
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Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Wages Expense (Corporate)	$	113,513
5			
6	Direct Filing Proposed Additonal Wages Expense (Corporat		126,182
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(12,669)
10			
11	Adjustment to Revenue and/or Expense	$	(12,669)
12			
13			
14			
15			

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Office Expense (Corporate)	$	129,971
5			
6	Direct Filing Proposed Additonal Office Expense (Corporate)		160,596
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(30,625)
10			
11	Adjustment to Revenue and/or Expense	$	(30,625)
12			
13			
14			
15			

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
Page 9
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Insurance Expense (Corporate)	$	31,445
5			
6	Direct Filing Proposed Additonal Insurance Expense (Corpor		32,863
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(1,418)
10			
11	Adjustment to Revenue and/or Expense	$	(1,418)
12			
13			
14			
15			

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 9

Exhibit
Rebuttal Schedule C-2
Page 10
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Misc. Expense (Corporate)	$	5,069
5			
6	Direct Filing Proposed Additonal Misc. Expense (Corporate)		4,997
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	71
10			
11	Adjustment to Revenue and/or Expense	$	71
12			
13			
14			
15			

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 10

Exhibit
Schedule C-2
Page 11
Witness: Bourassa

Line No.			
1	Service Company Charges		
2			
3	Total 2002 Charges	$ 4,981,460	
4	Allocation Factor (4 factor Formula)	0.1384	
5	Total Charges		$ 689,434
6			
7			
8	Direct Filing Proposed Charges	$ 5,153,711	
9	Allocation Factor (4 factor Formula)	0.1384	
10	Total Charges		713,274
11			
12			
13	Adjustment to Revenues and/or Expenses		$ (23,839)
14			
15			
16			
17			

Arizona American - Agua Fria Water
Test Year Ended December 31, 2001
Summary of Cost of Capital

Exhibit
Rebuttal Schedule D-1
Page 1
Witness: Stephenson

Line No.	Item of Capital	End of Test Year Percent of Total	End of Test Year (e) Cost Rate	End of Test Year Weighted Cost	End of Projected Year Percent of Total	End of Projected Year (e) Cost Rate	End of Projected Year Weighted Cost
1	Long-Term Debt	60.00%	4.86%	2.92%	60.00%	4.86%	2.92%
2							
3	Stockholder's Equity (c)	40.00%	11.50%	4.60%	40.00%	11.50%	4.60%
4							
5	Totals	100.00%		7.52%	100.00%		7.52%
6							
7							
8	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

ANTHEM
WATER

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

Line No.			
1	Fair Value Rate Base		$ 9,627,995
2			
3	Adjusted Operating Income		711,849
4			
5	Current Rate of Return		7.39%
6			
7	Required Operating Income		$ 723,640
8			
9	Required Rate of Return on Fair Value Rate Base		7.52%
10			
11	Operating Income Deficiency		$ 11,791
12			
13	Gross Revenue Conversion Factor		1.6286
14			
15	Increase in Gross Revenue		
16	Requirement		$ 19,203
17			

18	Customer		Present	Proposed	Dollar	Percent
19	Classification		Rates	Rates	Increase	Increase
20	5/8 Inch	Residential	$ 3,606	$ 3,645	$ 39	1.07%
21	3/4 Inch	Residential	620,738	627,283	6,545	1.05%
22	1 Inch	Residential	650,122	656,761	6,639	1.02%
23	1.5 Inch	Residential	2,834	2,862	28	0.98%
24	2 Inch	Residential	65,116	65,851	735	1.13%
25	3 Inch	Residential	-	-	-	0.00%
26	4 Inch	Residential	-	-	-	0.00%
27	3/4 Inch	Commercial	2,064	2,085	21	1.01%
28	1 Inch	Commercial	50,820	51,402	582	1.14%
29	1.5 Inch	Commercial	19,528	19,752	224	1.15%
30	2 Inch	Commercial	100,690	101,817	1,127	1.12%
31	3 Inch	Commercial	63,160	63,888	728	1.15%
32	2 Inch	Wholesale	-	-	-	0.00%
33	3 Inch	Wholesale	11,915	11,915	-	0.00%
34	6 Inch	Wholesale	56	56	-	0.00%
35	10 Inch	Wholesale	18,457	18,457	-	0.00%
36	4 Inch	Fire Protection	3,330	3,369	39	1.18%
37	6 Inch	Fire Protection	19,845	20,079	234	1.18%
38	Miscellaneous Revenues		1,950,387	1,950,387	-	0.00%
39	Citizens Water Resouces (Treatco)		226,872	226,872	-	0.00%
40	Subtotal Water Revenues		$ 3,809,540	$ 3,826,480	$ 16,940	0.44%
41						

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Schedule A-1
Page 2
Witness: Bourassa

Line No.						
1	**Revenue Annualization**					
2	Citizens Water Resouces (Treatco)		$ (18,289)	$ (18,289)	$ -	0.00%
3	3/4 Inch	Residential	67,152	67,853	701	1.04%
4	1 Inch	Residential	98,822	99,823	1,001	1.01%
5	2 Inch	Residential	(3,894)	(3,937)	(43)	1.12%
6	3/4 Inch	Commercial	1,642	1,659	17	1.02%
7	1 Inch	Commercial	2,646	2,672	27	1.01%
8	1.5 Inch	Commercial	12,807	12,953	146	1.14%
9	2 Inch	Commercial	13,560	13,712	152	1.12%
10	3 Inch	Commercial	(24,131)	(24,409)	(278)	1.15%
11	3 Inch	Wholesale	45,275	45,275	-	0.00%
12	6 Inch	Wholesale	5	5	-	0.00%
13	10 Inch	Wholesale	1,678	1,678	-	0.00%
14	6 Inch	Fire Protection	(405)	(410)	(5)	1.18%
15	Total Revenues Annualziations		196,868	198,586	1,718	0.87%
16	Total Water Revenues with		0	0	0	0
17	Revenue Annualizaiton		$ 4,006,408	$ 4,025,066	$ 18,658	0.47%
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35	SUPPORTING SCHEDULES:					
36	Rebuttal B-1					
37	Rebuttal C-1					
38	Rebuttal D-1					
39	Rebuttal H-1					
40						
41						
42						

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Summary of Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	RCND Rate base	Fair Value Rate base (RCND Only)
1				
2	Gross Utility Plant in Service	$ 41,526,829	$ 43,175,131	$ 43,175,131
3	Less: Accumulated Depreciation	2,086,614	2,177,290	2,177,290
4				
5	Net Utility Plant in Service	$ 39,440,216	$ 40,997,842	$ 40,997,842
6				
7	Less:			
8	Advances in Aid of			
9	Construction	29,093,642	30,248,440	30,248,440
10	Contributions in Aid of			
11	Construction - Net of amortization	1,075,425	1,118,111	1,118,111
12	Customer Meter Deposits	3,296	3,296	3,296
13	Deferred Income Taxes & Credits	-	-	-
14	Investment tax Credits	-	-	-
15	Plus:			
16	Unamortized Finance			
17	Charges	-	-	-
18	Deferred Tax Assets	-	-	-
19	Allowance for Working Capital	-	-	-
20	Citizens Acquisition Adjustment	10,960,967	-	-
21				
22	Total Rate Base	$ 20,228,820	$ 9,627,995	$ 9,627,995
23				
24				
25				
26	SUPPORTING SCHEDULES:			RECAP SCHEDULES:
27	Rebuttal B-2			Rebuttal A-1
28	Rebuttal B-3			
29				
30				
31				

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 41,428,652	(1)	98,178	$ 41,526,829
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	2,087,920	(2)	(1,306)	2,086,614
8					
9	Net Utility Plant				
10	in Service	$ 39,340,732			$ 39,440,216
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	29,093,642			29,093,642
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	1,075,425			1,075,425
18	Purposes Only)				
19	Customer Meter Deposits	3,296			3,296
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Unamortized Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	11,045,860	(3)	(84,893)	10,960,967
28					
29	Total	$ 20,214,229			$ 20,228,820
30					
31					
32	(1) See Rebuttal B-2, Page 2				
33	(2) See Rebuttal B-2, Page 3				
34	(3) See Rebuttal B-2, Page 4				
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					

Arizona American - Anthem Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ -	$ -	$ -	$ -	$ -	$ -
3	302.00	Franchises	3,827,476	-	3,827,476	-	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	$ 3,827,476	$ -	$ 3,827,476	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 5,000	$ -	$ 5,000	$ -	$ -	$ -
9	311.00	Structures and Improvements	93,281	118,894	212,175	7,086	-	7,086
10	312.00	Collecting and Impounding Res.	370,979	-	370,979	16,351	-	16,351
11	313.00	Lakes, Rivers, Other Intakes	394,971	-	394,971	26,323	-	26,323
12	314.00	Wells and Springs	461,497	-	461,497	22,685	-	22,685
13		**Subtotal Source of Supply**	$ 1,325,728	$ 118,894	$ 1,444,622	$ 72,445	$ -	$ 72,445
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 20,000	$ -	$ 20,000	$ -	$ -	$ -
17	321.00	Structures and Improvements	2,067,878	(10,000)	2,057,878	89,942	-	89,942
18	323.00	*Other Power Production*	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	9,609,435	(998)	9,608,437	1,005,929	-	1,005,929
20	326.00	Diesel Pumping Equipment	-	-	-	-	-	-
21	328.10	Gas Engine Pumping Equipment	1,476	-	1,476	97	-	97
22		***Subtotal Pumping***	$ 11,698,789	$ (10,998)	$ 11,687,791	$ 1,095,968	$ -	$ 1,095,968
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
26	331.00	Structures and Improvements	634,556	-	634,556	10,414	-	10,414
27	332.00	Water Treatment Equipment	4,375,605	2,944	4,378,548	253,912	-	253,912
28		**Subtotal Water Treatment**	$ 5,010,160	$ 2,944	$ 5,013,104	$ 264,326	$ -	$ 264,326
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
32	341.00	Structures and Improvements	18,469	-	18,469	305	-	305
33	342.00	Distribution, Reservoirs, & ST	1,866,969	15,364	1,882,332	82,474	-	82,474
34	343.00	Transmission and Distribution	15,456,070	-	15,456,070	453,932	-	453,932
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	773,445	-	773,445	23,942	-	23,942
37	346.00	Meters	411,258	-	411,258	11,468	-	11,468
38	348.00	Hydrants	618,693	-	618,693	15,871	-	15,871
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Transmission and Dis.**	$ 19,144,904	$ 15,364	$ 19,160,267	$ 587,992	$ -	$ 587,992
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ 171	$ -	$ 171	$ -	$ -	$ -
44	390.00	Structures and Improvements	117,574	-	117,574	11,840	-	11,840
45	391.00	Office Funiture and Equipment	60,023	(2,147)	57,876	13,552	-	13,552
46	391.10	Computer Equipment	81,094	(21,342)	59,753	(15,260)	-	(15,260)
47	392.00	Transportation Equipment	91,298	(1,028)	90,271	36,938	(1,293)	35,645
48	393.00	Stores Equipment	1,008	-	1,008	273	-	273
49	394.00	Tools, Shop and Garage	19,430	(5,000)	14,430	671	-	671
50	395.00	Laboratory Equipment	7,071	(450)	6,621	1,257	-	1,257
51	396.00	Power Operated Equipment	6,724	(2,523)	4,201	1,539	-	1,539
52	397.00	Communication Equipment	27,473	4,995	32,468	11,676	(13)	11,663
53	398.00	Miscellaneous Equipment	9,728	(531)	9,196	4,703	-	4,703
54		**Subtotal General**	$ 421,595	$ (28,026)	$ 393,569	$ 67,188	$ (1,306)	$ 65,882
55								
56								
57				-			-	
58				-			-	
59		TOTAL WATER PLANT	$ 41,428,652	$ 98,178	$ 41,526,830	$ 2,087,920	$ (1,306)	$ 2,086,614
60								
61								
62		SUPPORTING SCHEDULES:						
63		Rebuttal B-2, page 2a, 2b, 3a, 3b						
64								
65								

Arizona American - Anthem Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Blank Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					-
3	302.00	Franchises	3,827,476					-
4	303.00	Miscellaneous Intangibles	-					-
5		**Subtotal Intangible**	$ 3,827,476	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 5,000					-
9	311.00	Structures and Improvements	93,281					118,894
10	312.00	Collecting and Impounding Res.	370,979					-
11	313.00	Lakes, Rivers, Other Intakes	394,971					-
12	314.00	Wells and Springs	461,497					-
13		**Subtotal Source of Supply**	$ 1,325,728	$ -	$ -	$ -	$ -	$ 118,894
14								
15		**Pumping**						-
16	320.00	Land and Land Rights	$ 20,000					-
17	321.00	Structures and Improvements	2,067,878					(10,000)
18	323.00	Other Power Production	-					-
19	325.00	Electric Pumping Equipment	9,609,435					(998)
20	326.00	Diesel Pumping Equipment	-					-
21	328.10	Gas Engine Pumping Equipment	1,476					-
22		**Subtotal Pumping**	$ 11,698,789	$ -	$ -	$ -	$ -	$ (10,998)
23								
24		**Water Treatment**						
25	330.00	*Land and Land Rights*	$ -					-
26	331.00	Structures and Improvements	634,556					-
27	332.00	Water Treatment Equipment	4,375,605					2,944
28		**Subtotal Water Treatment**	$ 5,010,160	$ -	$ -	$ -	$ -	$ 2,944
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -					-
32	341.00	Structures and Improvements	18,469					-
33	342.00	Distribution, Reservoirs, & ST	1,866,969					15,364
34	343.00	Transmission and Distribution	15,456,070					-
35	344.00	Fire Mains	-					-
36	345.00	Services	773,445					-
37	346.00	Meters	411,258					-
38	348.00	Hydrants	618,693					-
39	349.00	Other Transmission & Distribution	-					-
40		**Subtotal Transmission and Distributio**	$ 19,144,904	$ -	$ -	$ -	$ -	$ 15,364
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ 171					-
44	390.00	Structures and Improvements	117,574					-
45	391.00	Office Funiture and Equipment	60,023					(2,147)
46	391.10	Computer Equipment	81,094					-
47	392.00	Transportation Equipment	91,298					(1,028)
48	393.00	Stores Equipment	1,008					-
49	394.00	Tools, Shop and Garage	19,430					(5,000)
50	395.00	Laboratory Equipment	7,071					(450)
51	396.00	Power Operated Equipment	6,724					(2,500)
52	397.00	Communication Equipment	27,473					4,995
53	398.00	Miscellaneous Equipment	9,728					-
54		**Subtotal General**	$ 421,595	$ -	$ -	$ -	$ -	$ (6,129)
55								
56								
57								
58								
59		TOTAL WATER PLANT	$ 41,428,652	$ -	$ -	$ -	$ -	$ 120,074
60								

ADJ #		Reference
1	*Plant Not Used and Useful*	ACC Staff
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decision	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American - Anthem Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	Blank AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Original Cost
1		**Intangible**							
2	301.00	Organization						$ -	$ -
3	302.00	Franchises						-	3,827,476
4	303.00	Miscellaneous Intangibles						-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,827,476
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights						$ -	$ 5,000
9	311.00	Structures and Improvements						118,894	212,175
10	312.00	Collecting and Impounding Res.						-	370,979
11	313.00	Lakes, Rivers, Other Intakes						-	394,971
12	314.00	Wells and Springs						-	461,497
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ -	$ -	$ 118,894	$ 1,444,622
14									
15		**Pumping**							
16	320.00	Land and Land Rights						$ -	$ 20,000
17	321.00	Structures and Improvements						(10,000)	2,057,878
18	323.00	Other Power Production						-	-
19	325.00	Electric Pumping Equipment						(998)	9,608,437
20	326.00	Diesel Pumping Equipment						-	-
21	328.10	Gas Engine Pumping Equipment						-	1,476
22		**Subtotal Pumping**	$ -	$ -	$ -	$ -	$ -	$ (10,998)	$ 11,687,791
23									
24		**Water Treatment**						$ -	
25	330.00	Land and Land Rights						-	$ -
26	331.00	Structures and Improvements						-	634,556
27	332.00	Water Treatment Equipment						2,944	4,378,548
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ -	$ -	$ 2,944	$ 5,013,104
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights						$ -	$ -
32	341.00	Structures and Improvements						-	18,469
33	342.00	Distribution, Reservoirs, & ST						15,364	1,882,332
34	343.00	Transmission and Distribution						-	15,456,070
35	344.00	Fire Mains						-	-
36	345.00	Services						-	773,445
37	346.00	Meters						-	411,258
38	348.00	Hydrants						-	618,693
39	349.00	Other Transmission & Distribution						-	-
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ -	$ -	$ 15,364	$ 19,160,267
41									
42		**Allocated Common Plant**							
43	389.00	Land and Land Rights			-			$ -	$ 171
44	390.00	Structures and Improvements			-			-	117,574
45	391.00	Office Furniture and Equipment			-			(2,147)	57,876
46	391.10	Computer Equipment			(21,342)			(21,342)	59,753
47	392.00	Transportation Equipment			-			(1,028)	90,271
48	393.00	Stores Equipment			-			-	1,008
49	394.00	Tools, Shop and Garage			-			(5,000)	14,430
50	395.00	Laboratory Equipment			-			(450)	6,621
51	396.00	Power Operated Equipment			(23)			(2,523)	4,201
52	397.00	Communication Equipment			-			4,995	32,468
53	398.00	Miscellaneous Equipment			(531)			(531)	9,196
54		**Subtotal General**	$ -	$ -	$ (21,896)	$ -	$ -	$ (28,026)	$ 393,569
55									
56									
57								-	-
58								-	-
59		TOTAL WATER PLANT	$ -	$ -	$ (21,896)	$ -	$ -	$ 98,178	$ 41,526,830
60									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American - Anthem Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Blank Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					
3	302.00	Franchises	-					
4	303.00	Miscellaneous Intangibles	-					
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ -					
9	311.00	Structures and Improvements	7,086					
10	312.00	Collecting and Impounding Res.	16,351					
11	313.00	Lakes, Rivers, Other Intakes	26,323					
12	314.00	Wells and Springs	22,685					
13		**Subtotal Source of Supply**	$ 72,445	$ -	$ -	$ -	$ -	$ -
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ -					
17	321.00	Structures and Improvements	89,942					
18	323.00	Other Power Production	-					
19	325.00	Electric Pumping Equipment	1,005,929					
20	326.00	Diesel Pumping Equipment	-					
21	328.10	Gas Engine Pumping Equipment	97					
22		**Subtotal Pumping**	$ 1,095,968	$ -	$ -	$ -	$ -	$ -
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					
26	331.00	Structures and Improvements	10,414					
27	332.00	Water Treatment Equipment	253,912					
28		**Subtotal Water Treatment**	$ 264,326	$ -	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -					
32	341.00	Structures and Improvements	305					
33	342.00	Distribution, Reservoirs, & ST	82,474					
34	343.00	Transmission and Distribution	453,932					
35	344.00	Fire Mains	-					
36	345.00	Services	23,942					
37	346.00	Meters	11,468					
38	348.00	Hydrants	15,871					
39	349.00	Other Transmission & Distribution	-					
40		**Subtotal Transmission and Distributio**	$ 587,992	$ -	$ -	$ -	$ -	$ -
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ -					
44	390.00	Structures and Improvements	11,840					
45	391.00	Office Funiture and Equipment	13,552					
46	391.10	Computer Equipment	(15,260)					
47	392.00	Transportation Equipment	35,645					
48	393.00	Stores Equipment	273					
49	394.00	Tools, Shop and Garage	671					
50	395.00	Laboratory Equipment	1,257					
51	396.00	Power Operated Equipment	1,539					
52	397.00	Communication Equipment	11,663					
53	398.00	Miscellaneous Equipment	4,703					
54		**Subtotal General**	$ 65,882	$ -	$ -	$ -	$ -	$ -
55								
56								
57			-					
58			-					
59		TOTAL WATER PLANT	$ 2,086,614	$ -	$ -	$ -	$ -	$ -
60								
61								
62								
63								
64								
65								
66								
67								
68								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Schedule B-2, Page 6
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decision	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American - Anthem Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	Blank AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization						$ -	$ -
3	302.00	Franchises						-	-
4	303.00	Miscellaneous Intangibles						-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights						$ -	$ -
9	311.00	Structures and Improvements						-	7,086
10	312.00	Collecting and Impounding Res.						-	16,351
11	313.00	Lakes, Rivers, Other Intakes						-	26,323
12	314.00	Wells and Springs						-	22,685
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ -	$ -	$ -	$ 72,445
14									
15		**Pumping**							
16	320.00	Land and Land Rights						$ -	$ -
17	321.00	Structures and Improvements						-	89,942
18	323.00	Other Power Production						-	-
19	325.00	Electric Pumping Equipment						-	1,005,929
20	326.00	Diesel Pumping Equipment						-	-
21	328.10	Gas Engine Pumping Equipment						-	97
22		**Subtotal Pumping**	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,095,968
23									
24		**Water Treatment**							
25	330.00	Land and Land Rights						$ -	$ -
26	331.00	Structures and Improvements						-	10,414
27	332.00	Water Treatment Equipment						-	253,912
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ -	$ -	$ -	$ 264,326
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights						$ -	$ -
32	341.00	Structures and Improvements						-	305
33	342.00	Distribution, Reservoirs, & ST						-	82,474
34	343.00	Transmission and Distribution						-	453,932
35	344.00	Fire Mains						-	-
36	345.00	Services						-	23,942
37	346.00	Meters						-	11,468
38	348.00	Hydrants						-	15,871
39	349.00	Other Transmission & Distribution						-	-
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ -	$ -	$ -	$ 587,992
41									
42		**Allocated Common Plant**							
43	389.00	Land and Land Rights						$ -	$ -
44	390.00	Structures and Improvements			-			-	11,840
45	391.00	Office Funiture and Equipment			-			-	13,552
46	391.10	Computer Equipment			-			-	(15,260)
47	392.00	Transportation Equipment			(1,293)			(1,293)	34,352
48	393.00	Stores Equipment			-			-	273
49	394.00	Tools, Shop and Garage			-			-	671
50	395.00	Laboratory Equipment			-			-	1,257
51	396.00	Power Operated Equipment			-			-	1,539
52	397.00	Communication Equipment			(13)			(13)	11,650
53	398.00	Miscellaneous Equipment			-			-	4,703
54		**Subtotal General**	$ -	$ -	$ (1,306)	$ -	$ -	$ (1,306)	$ 64,576
55									
56									
57								-	-
58								-	-
59		TOTAL WATER PLANT	$ -	$ -	$ (1,306)	$ -	$ -	$ (1,306)	$ 2,085,308
60									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American - Anthem Water
Common Plant Allocation
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Original Cost	Rebuttal Allocated Original Cost	Rebuttal Allocated Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.03511	$ 171	$ 171	$ -	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.03511	117,574	117,574	-	10,916	10,916	-
5	391.00	Office Funiture and Equipment	0.03511	35,023	35,023	-	12,656	12,656	-
6	391.10	Computer Equipment	0.03511	50,142	28,801	(21,342)	(15,260)	(16,553)	(1,293)
7	392.00	Transportation Equipment	0.03511	63,098	63,098	-	36,445	36,445	-
8	393.00	Stores Equipment	0.03511	1,008	1,008	-	273	273	-
9	394.00	Tools, Shop and Garage	0.03511	14,430	14,430	-	640	640	-
10	395.00	Laboratory Equipment	0.03511	4,571	4,571	-	806	806	-
11	396.00	Power Operated Equipment	0.03511	4,224	4,201	(23)	1,503	1,490	(13)
12	397.00	Communication Equipment	0.03511	20,273	20,273	-	11,676	11,676	-
13	398.00	Miscellaneous Equipment	0.03511	9,728	9,196	(531)	4,509	3,978	(531)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 320,243	$ 298,347	$ (21,896)	$ 64,164	$ 62,327	$ (1,837)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-2, Page 5								
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Line No.	Account No.	Description		Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1									
2	389.00		0	$ 4,880	$ -	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements		3,349,189	-	3,349,189	310,963	-	310,963
4	391.00	Office Funiture and Equipment		997,650	-	997,650	360,503	-	360,503
5	391.10	Computer Equipment		1,428,345	(607,932)	820,413	(434,702)	(36,834)	(471,536)
6	392.00	Transportation Equipment		1,797,409	-	1,797,409	1,038,162	-	1,038,162
7	393.00	Stores Equipment		28,727	-	28,727	7,782	-	7,782
8	394.00	Tools, Shop and Garage		411,051	-	411,051	18,237	-	18,237
9	395.00	Laboratory Equipment		130,207	-	130,207	22,954	-	22,954
10	396.00	Power Operated Equipment		120,325	(669)	119,656	42,813	(368)	42,444
11	397.00	Communication Equipment		577,488	-	577,488	332,600	-	332,600
12	398.00	Miscellaneous Equipment		277,101	(15,137)	261,964	128,455	(15,137)	113,318
13									
14									
15		TOTALCOMMON PLANT		$ 9,122,373	$ (623,738)	$ 8,498,635	$ 1,827,766	$ (52,339)	$ 1,775,427
16									
17				SUPPORTING SCHEDULES					
18				Rebuttal Schedule B-2, Page 6a, 6b, 7a, 7b					
19									
20									

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880						
3	390.00	Structures and Improvements	3,349,189						
4	391.00	Office Funiture and Equipment	997,650						
5	391.10	Computer Equipment	1,428,345		(607,932)				
6	392.00	Transportation Equipment	1,797,409						
7	393.00	Stores Equipment	28,727						
8	394.00	Tools, Shop and Garage	411,051						
9	395.00	Laboratory Equipment	130,207						
10	396.00	Power Operated Equipment	120,325		(669)				
11	397.00	Communication Equipment	577,488						
12	398.00	Miscellaneous Equipment	277,101	(458)		(14,679)			
13		**Subtotal General**	$ 9,122,373	$ (458)	$ (608,601)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
2	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
3	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights							$ -	$ 4,880
3	390.00	Structures and Improvements							-	3,349,189
4	391.00	Office Funiture and Equipment							-	997,650
5	391.10	Computer Equipment							(607,932)	820,413
6	392.00	Transportation Equipment							-	1,797,409
7	393.00	Stores Equipment							-	28,727
8	394.00	Tools, Shop and Garage							-	411,051
9	395.00	Laboratory Equipment							-	130,207
10	396.00	Power Operated Equipment							(669)	119,656
11	397.00	Communication Equipment							-	577,488
12	398.00	Miscellaneous Equipment							(15,137)	261,964
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (623,738)	$ 8,498,635
14										

ADJ #	Reference
6	
7	
8	
9	
10	

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7a
Witness: Bour

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -						
3	390.00	Structures and Improvements	310,963						
4	391.00	Office Funiture and Equipment	360,503						
5	391.10	Computer Equipment	(434,702)		(36,834)				
6	392.00	Transportation Equipment	1,038,162						
7	393.00	Stores Equipment	7,782						
8	394.00	Tools, Shop and Garage	18,237						
9	395.00	Laboratory Equipment	22,954						
10	396.00	Power Operated Equipment	42,813		(368)				
11	397.00	Communication Equipment	332,600						
12	398.00	Miscellaneous Equipment	128,455	(458)		(14,679)			
13		**Subtotal General**	$ 1,827,766	$ (458)	$ (37,202)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights							$ -	$ -
3	390.00	Structures and Improvements							-	310,963
4	391.00	Office Funiture and Equipment							-	360,503
5	391.10	Computer Equipment							(36,834)	(471,536)
6	392.00	Transportation Equipment							-	1,038,162
7	393.00	Stores Equipment							-	7,782
8	394.00	Tools, Shop and Garage							-	18,237
9	395.00	Laboratory Equipment							-	22,954
10	396.00	Power Operated Equipment							(368)	42,444
11	397.00	Communication Equipment							-	332,600
12	398.00	Miscellaneous Equipment							(15,137)	113,318
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (52,339)	$ 1,775,427
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										

ADJ #	Reference
6	
7	
8	
9	
10	

Arizona American - Anthem Water
Test Year Ending December 31, 2001
RCND Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-3
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Proforma Adjustments Label	Proforma Adjustments Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 44,418,748	(1)	(1,243,617)	$ 43,175,131
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	2,231,837	(2)	(54,547)	2,177,290
8					
9	Net Utility Plant				
10	in Service	$ 42,186,911			$ 40,997,842
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	31,193,464	(3)	(945,024)	30,248,440
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	1,153,043	(4)	(34,932)	1,118,111
18	Purposes Only)				
19	Customer Meter Deposits	3,296			3,296
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Unamortized Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27					
28					
29	Total	$ 9,837,108			$ 9,627,995
30					
31					
32	(1) See B-3, Page 2				
33	(2) See B-3, Page 3				
34	(3) Adjust AIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
35	(4) Adjust CIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
36					
37					
38					
39					
40					
41					
42					

Arizona American - Anthem Water
RCND Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ -	$ -	$ -	$ -	$ -	$ -
3	302.00	Franchises	4,019,354	(191,878)	3,827,476	-	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	$ 4,019,354	$ (191,878)	$ 3,827,476	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 5,519	$ (519)	$ 5,000	$ -	$ -	$ -
9	311.00	Structures and Improvements	103,569	116,555	220,124	7,766	(155)	7,612
10	312.00	Collecting and Impounding Res.	409,486	(28,825)	380,661	17,727	(1,030)	16,697
11	313.00	Lakes, Rivers, Other Intakes	435,970	(30,689)	405,280	28,543	(1,662)	26,881
12	314.00	Wells and Springs	509,321	(25,248)	484,073	25,036	(1,241)	23,795
13		**Subtotal Source of Supply**	$ 1,463,865	$ 31,273	$ 1,495,138	$ 79,072	$ (4,087)	$ 74,984
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ 20,000	$ -	$ 20,000	$ -	$ -	$ -
17	321.00	Structures and Improvements	2,278,216	(57,823)	2,220,394	97,380	(1,691)	95,689
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	10,415,980	(309,608)	10,106,372	1,072,586	(25,505)	1,047,081
20	326.00	Diesel Pumping Equipment	-	-	-	-	-	-
21	328.10	Gas Engine Pumping Equipment	1,502	(26)	1,476	98	(1)	97
22		**Subtotal Pumping**	$ 12,715,698	$ (367,456)	$ 12,348,241	$ 1,170,064	$ (27,197)	$ 1,142,867
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
26	331.00	Structures and Improvements	643,522	(2,038)	641,483	10,486	(16)	10,470
27	332.00	Water Treatment Equipment	4,552,835	(66,207)	4,486,628	260,665	(2,635)	258,030
28		**Subtotal Water Treatment**	$ 5,196,356	$ (68,245)	$ 5,128,111	$ 271,151	$ (2,651)	$ 268,500
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
32	341.00	Structures and Improvements	20,386	(436)	19,951	321	(4)	317
33	342.00	Distribution, Reservoirs, & ST	2,051,522	(122,785)	1,928,737	89,494	(5,255)	84,239
34	343.00	Transmission and Distribution	16,558,831	(468,957)	16,089,874	480,612	(11,643)	468,969
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	811,938	(14,039)	797,899	25,130	(435)	24,695
37	346.00	Meters	429,324	(7,735)	421,590	11,998	(242)	11,756
38	348.00	Hydrants	650,577	3,571	654,148	16,689	92	16,780
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Transmission and Dis.**	$ 20,522,578	$ (610,379)	$ 19,912,199	$ 624,243	$ (17,487)	$ 606,756
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ 443	$ (272)	$ 171	$ -	$ -	$ -
44	390.00	Structures and Improvements	159,573	(4,167)	155,407	18,689	(582)	18,107
45	391.00	Office Funiture and Equipment	70,179	(2,105)	68,073	18,524	332	18,857
46	391.10	Computer Equipment	86,724	(24,099)	62,625	(16,975)	(1,246)	(18,222)
47	392.00	Transportation Equipment	98,017	(2,007)	96,010	41,060	(588)	40,472
48	393.00	Stores Equipment	1,315	14	1,329	384	13	397
49	394.00	Tools, Shop and Garage	23,388	(5,031)	18,358	526	14	541
50	395.00	Laboratory Equipment	7,791	(504)	7,287	1,411	(4)	1,407
51	396.00	Power Operated Equipment	7,919	(2,443)	5,476	2,004	15	2,019
52	397.00	Communication Equipment	31,699	4,624	36,323	14,587	(103)	14,484
53	398.00	Miscellaneous Equipment	13,848	(943)	12,905	7,096	(975)	6,121
54		**Subtotal General**	$ 500,897	$ (36,932)	$ 463,965	$ 87,307	$ (3,124)	$ 84,183
55								
56								
57								
58								
59		TOTAL WATER PLANT	$ 44,418,748	$ (1,243,617)	$ 43,175,131	$ 2,231,837	$ (54,547)	$ 2,177,290
60								
61		SUPPORTING SCHEDULES:						
62		Rebuttal B-3, page 2a, 2b, 3a, 3b						
63								

Arizona American - Anthem Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Blank Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					-
3	302.00	Franchises	4,019,354					-
4	303.00	Miscellaneous Intangibles	-					-
5		**Subtotal Intangible**	$ 4,019,354	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ 5,519					-
9	311.00	Structures and Improvements	103,569					118,894
10	312.00	Collecting and Impounding Res.	409,486					-
11	313.00	Lakes, Rivers, Other Intakes	435,970					-
12	314.00	Wells and Springs	509,321					-
13		**Subtotal Source of Supply**	$ 1,463,865	$ -	$ -	$ -	$ -	$ 118,894
14								
15		**Pumping**						-
16	320.00	Land and Land Rights	$ 20,000					-
17	321.00	Structures and Improvements	2,278,216					(10,000)
18	323.00	Other Power Production	-					-
19	325.00	Electric Pumping Equipment	10,415,980					(998)
20	326.00	Diesel Pumping Equipment	-					-
21	328.10	Gas Engine Pumping Equipment	1,502					-
22		**Subtotal Pumping**	$ 12,715,698	$ -	$ -	$ -	$ -	$ (10,998)
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					-
26	331.00	Structures and Improvements	643,522					-
27	332.00	Water Treatment Equipment	4,552,835					2,944
28		**Subtotal Water Treatment**	$ 5,196,356	$ -	$ -	$ -	$ -	$ 2,944
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -					-
32	341.00	Structures and Improvements	20,386					-
33	342.00	Distribution, Reservoirs, & ST	2,051,522					15,364
34	343.00	Transmission and Distribution	16,558,831					-
35	344.00	Fire Mains	-					-
36	345.00	Services	811,938					-
37	346.00	Meters	429,324					-
38	348.00	Hydrants	650,577					-
39	349.00	Other Transmission & Distribution	-					-
40		**Subtotal Transmission and Distributio**	$ 20,522,578	$ -	$ -	$ -	$ -	$ 15,364
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ 443					-
44	390.00	Structures and Improvements	159,573					-
45	391.00	Office Funiture and Equipment	70,179					(2,147)
46	391.10	Computer Equipment	86,724					-
47	392.00	Transportation Equipment	98,017					(1,028)
48	393.00	Stores Equipment	1,315					-
49	394.00	Tools, Shop and Garage	23,388					(5,000)
50	395.00	Laboratory Equipment	7,791					(450)
51	396.00	Power Operated Equipment	7,919					(2,500)
52	397.00	Communication Equipment	31,699					4,995
53	398.00	Miscellaneous Equipment	13,848					-
54		**Subtotal General**	$ 500,897	$ -	$ -	$ -	$ -	$ (6,129)
55								
56								
57								
58								
59		TOTAL WATER PLANT	$ 44,418,748	$ -	$ -	$ -	$ -	$ 120,074
60								

ADJ #		Reference
1	Plant Not Used and Useful	Blank
2	Unidentified Plant	Blank
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decision	Blank
5	Post Test Year Plant	ACC Staff

Arizona American - Anthem Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	Blank AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Trended Reproduction Cost New
1		**Intangible**							
2	301.00	Organization				-		$ -	$ -
3	302.00	Franchises				(191,878)		(191,878)	3,827,476
4	303.00	Miscellaneous Intangibles				-		-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ (191,878)	$ -	$ (191,878)	$ 3,827,476
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights				(519)		$ (519)	$ 5,000
9	311.00	Structures and Improvements				(2,339)		116,555	220,124
10	312.00	Collecting and Impounding Res.				(28,825)		(28,825)	380,661
11	313.00	Lakes, Rivers, Other Intakes				(30,689)		(30,689)	405,280
12	314.00	Wells and Springs				(25,248)		(25,248)	484,073
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ (87,621)	$ -	$ 31,273	$ 1,495,138
14									
15		**Pumping**							
16	320.00	Land and Land Rights				-		$ -	$ 20,000
17	321.00	Structures and Improvements				(47,823)		(57,823)	2,220,394
18	323.00	Other Power Production				-		-	-
19	325.00	Electric Pumping Equipment				(308,610)		(309,608)	10,106,372
20	326.00	Diesel Pumping Equipment				-		-	-
21	328.10	Gas Engine Pumping Equipment				(26)		(26)	1,476
22		**Subtotal Pumping**	$ -	$ -	$ -	$ (356,459)	$ -	$ (367,456)	$ 12,348,241
23									
24		**Water Treatment**						$ -	
25	330.00	Land and Land Rights				-		-	$ -
26	331.00	Structures and Improvements				(2,038)		(2,038)	641,483
27	332.00	Water Treatment Equipment				(69,150)		(66,207)	4,486,628
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ (71,189)	$ -	$ (68,245)	$ 5,128,111
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights				-		$ -	$ -
32	341.00	Structures and Improvements				(436)		(436)	19,951
33	342.00	Distribution, Reservoirs, & ST				(138,148)		(122,785)	1,928,737
34	343.00	Transmission and Distribution				(468,957)		(468,957)	16,089,874
35	344.00	Fire Mains				-		-	-
36	345.00	Services				(14,039)		(14,039)	797,899
37	346.00	Meters				(7,735)		(7,735)	421,590
38	348.00	Hydrants				3,571		3,571	654,148
39	349.00	Other Transmission & Distribution				-		-	-
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ (625,743)	$ -	$ (610,379)	$ 19,912,199
41									
42		**Allocated Common Plant**							
43	389.00	Land and Land Rights			(272)			$ (272)	$ 171
44	390.00	Structures and Improvements			(4,167)			(4,167)	155,407
45	391.00	Office Funiture and Equipment			42			(2,105)	68,073
46	391.10	Computer Equipment			(24,099)			(24,099)	62,625
47	392.00	Transportation Equipment			(979)			(2,007)	96,010
48	393.00	Stores Equipment			14			14	1,329
49	394.00	Tools, Shop and Garage			(31)			(5,031)	18,358
50	395.00	Laboratory Equipment			(55)			(504)	7,287
51	396.00	Power Operated Equipment			57			(2,443)	5,476
52	397.00	Communication Equipment			(371)			4,624	36,323
53	398.00	Miscellaneous Equipment			(943)			(943)	12,905
54		**Subtotal General**	$ -	$ -	$ (30,802)	$ -	$ -	$ (36,932)	$ 463,965
55									
56									
57								-	-
58								-	-
59		TOTAL WATER PLANT	$ -	$ -	$ (30,802)	$ (1,332,889)	$ -	$ (1,243,617)	$ 43,175,131
60									

ADJ #		Reference
6	Remove Trended AFUDC Adjustm	Blank
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American - Anthem Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Blank Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					
3	302.00	Franchises	-					
4	303.00	Miscellaneous Intangibles	-					
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ -					
9	311.00	Structures and Improvements	7,766					
10	312.00	Collecting and Impounding Res.	17,727					
11	313.00	Lakes, Rivers, Other Intakes	28,543					
12	314.00	Wells and Springs	25,036					
13		**Subtotal Source of Supply**	$ 79,072	$ -	$ -	$ -	$ -	$ -
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ -					
17	321.00	Structures and Improvements	97,380					
18	323.00	Other Power Production	-					
19	325.00	Electric Pumping Equipment	1,072,586					
20	326.00	Diesel Pumping Equipment	-					
21	328.10	Gas Engine Pumping Equipment	98					
22		**Subtotal Pumping**	$ 1,170,064	$ -	$ -	$ -	$ -	$ -
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					
26	331.00	Structures and Improvements	10,486					
27	332.00	Water Treatment Equipment	260,665					
28		**Subtotal Water Treatment**	$ 271,151	$ -	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -					
32	341.00	Structures and Improvements	321					
33	342.00	Distribution, Reservoirs, & ST	89,494					
34	343.00	Transmission and Distribution	480,612					
35	344.00	Fire Mains	-					
36	345.00	Services	25,130					
37	346.00	Meters	11,998					
38	348.00	Hydrants	16,689					
39	349.00	Other Transmission & Distribution	-					
40		**Subtotal Transmission and Distributio**	$ 624,243	$ -	$ -	$ -	$ -	$ -
41								
42		**Allocated Common Plant**						
43	389.00	Land and Land Rights	$ -					
44	390.00	Structures and Improvements	18,689					
45	391.00	Office Funiture and Equipment	18,524					
46	391.10	Computer Equipment	(16,975)					
47	392.00	Transportation Equipment	41,060					
48	393.00	Stores Equipment	384					
49	394.00	Tools, Shop and Garage	526					
50	395.00	Laboratory Equipment	1,411					
51	396.00	Power Operated Equipment	2,004					
52	397.00	Communication Equipment	14,587					
53	398.00	Miscellaneous Equipment	7,096					
54		**Subtotal General**	$ 87,307	$ -	$ -	$ -	$ -	$ -
55								
56								
57			-					
58			-					
59		TOTAL WATER PLANT	$ 2,231,837	$ -	$ -	$ -	$ -	$ -
60								

ADJ #		Reference
1	Plant Not Used and Useful	Blank
2	Unidentified Plant	Blank
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decision	Blank
5	Post Test Year Plant	ACC Staff

Arizona American - Anthem Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	Blank AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization				-		$ -	$ -
3	302.00	Franchises				-		-	-
4	303.00	Miscellaneous Intangibles				-		-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Source of Supply**							
8	310.00	Land and Land Rights				-		$ -	$ -
9	311.00	Structures and Improvements				(155)		(155)	7,612
10	312.00	Collecting and Impounding Res.				(1,030)		(1,030)	16,697
11	313.00	Lakes, Rivers, Other Intakes				(1,662)		(1,662)	26,881
12	314.00	Wells and Springs				(1,241)		(1,241)	23,795
13		**Subtotal Source of Supply**	$ -	$ -	$ -	$ (4,087)	$ -	$ (4,087)	$ 74,984
14									
15		**Pumping**							
16	320.00	Land and Land Rights				-		$ -	$ -
17	321.00	Structures and Improvements				(1,691)		(1,691)	95,689
18	323.00	Other Power Production				-		-	-
19	325.00	Electric Pumping Equipment				(25,505)		(25,505)	1,047,081
20	326.00	Diesel Pumping Equipment				-		-	-
21	328.10	Gas Engine Pumping Equipment				(1)		(1)	97
22		**Subtotal Pumping**	$ -	$ -	$ -	$ (27,197)	$ -	$ (27,197)	$ 1,142,867
23									
24		**Water Treatment**							
25	330.00	Land and Land Rights				-		$ -	$ -
26	331.00	Structures and Improvements				(16)		(16)	10,470
27	332.00	Water Treatment Equipment				(2,635)		(2,635)	258,030
28		**Subtotal Water Treatment**	$ -	$ -	$ -	$ (2,651)	$ -	$ (2,651)	$ 268,500
29									
30		**Transmission and Distribution**							
31	340.00	Land and Land Rights				-		$ -	$ -
32	341.00	Structures and Improvements				(4)		(4)	317
33	342.00	Distribution, Reservoirs, & ST				(5,255)		(5,255)	84,239
34	343.00	Transmission and Distribution				(11,643)		(11,643)	468,969
35	344.00	Fire Mains				-		-	-
36	345.00	Services				(435)		(435)	24,695
37	346.00	Meters				(242)		(242)	11,756
38	348.00	Hydrants				92		92	16,780
39	349.00	Other Transmission & Distribution				-		-	-
40		**Subtotal Transmission and Distributio**	$ -	$ -	$ -	$ (17,487)	$ -	$ (17,487)	$ 606,756
41									
42		**Allocated Common Plant**							
43	389.00	Land and Land Rights			-			$ -	$ -
44	390.00	Structures and Improvements			(582)			(582)	18,107
45	391.00	Office Funiture and Equipment			332			332	18,857
46	391.10	Computer Equipment			(1,246)			(1,246)	(18,222)
47	392.00	Transportation Equipment			(588)			(588)	40,472
48	393.00	Stores Equipment			13			13	397
49	394.00	Tools, Shop and Garage			14			14	541
50	395.00	Laboratory Equipment			(4)			(4)	1,407
51	396.00	Power Operated Equipment			15			15	2,019
52	397.00	Communication Equipment			(103)			(103)	14,484
53	398.00	Miscellaneous Equipment			(975)			(975)	6,121
54		**Subtotal General**	$ -	$ -	$ (3,124)	$ -	$ -	$ (3,124)	$ 84,183
55									
56									
57								-	-
58								-	-
59		TOTAL WATER PLANT	$ -	$ -	$ (3,124)	$ (51,423)	$ -	$ (54,547)	$ 2,177,290
60									

ADJ #		Reference
6	Remove Trended AFUDC Adjustm	Blank
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American - Anthem Water
RCND Common Plant Allocation
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Trended Amount	Rebuttal Allocated Trended Amount	Rebuttal Allocated Trended Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.03511	$ 443	$ 171	$ (272)	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.03511	159,573	155,407	(4,167)	17,765	17,183	(582)
5	391.00	Office Funiture and Equipment	0.03511	45,179	45,221	42	17,628	17,960	332
6	391.10	Computer Equipment	0.03511	55,773	31,674	(24,099)	(16,975)	(18,222)	(1,246)
7	392.00	Transportation Equipment	0.03511	69,817	68,838	(979)	40,567	39,979	(588)
8	393.00	Stores Equipment	0.03511	1,315	1,329	14	384	397	13
9	394.00	Tools, Shop and Garage	0.03511	18,388	18,358	(31)	495	510	14
10	395.00	Laboratory Equipment	0.03511	5,291	5,236	(55)	960	956	(4)
11	396.00	Power Operated Equipment	0.03511	5,419	5,476	57	1,968	1,983	15
12	397.00	Communication Equipment	0.03511	24,499	24,128	(371)	14,587	14,484	(103)
13	398.00	Miscellaneous Equipment	0.03511	13,848	12,905	(943)	6,903	5,927	(975)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 399,546	$ 368,743	$ (30,802)	$ 84,283	$ 81,159	$ (3,124)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-3, Page 5								
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 5
Witness: Bourassa

Line No.	Account No.	Description	Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Trended Direct Accumulated Depreciation	Adjustment	Rebuttal Trended Accumulated Depreciation
1								
2	389.00		0 $ 12,628	$ (7,748)	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements	4,545,571	(118,688)	4,426,882	506,059	(16,579)	489,480
4	391.00	Office Funiture and Equipment	1,286,955	1,191	1,288,146	502,142	9,471	511,613
5	391.10	Computer Equipment	1,588,744	(686,472)	902,272	(483,558)	(35,499)	(519,057)
6	392.00	Transportation Equipment	1,988,785	(27,882)	1,960,903	1,155,595	(16,750)	1,138,845
7	393.00	Stores Equipment	37,463	387	37,850	10,952	359	11,312
8	394.00	Tools, Shop and Garage	523,808	(874)	522,934	14,105	411	14,516
9	395.00	Laboratory Equipment	150,719	(1,554)	149,166	27,352	(109)	27,243
10	396.00	Power Operated Equipment	154,364	1,634	155,998	56,063	425	56,488
11	397.00	Communication Equipment	697,864	(10,566)	687,298	415,524	(2,934)	412,590
12	398.00	Miscellaneous Equipment	394,470	(26,855)	367,615	196,632	(27,786)	168,847
13								
14								
15		TOTALCOMMON PLANT	$ 11,381,370	$ (877,427)	$ 10,503,943	$ 2,400,866	$ (88,989)	$ 2,311,877
16								
17			SUPPORTING SCHEDULES					
18			Rebuttal Schedule B-3, Page 6a, 6b, 7a, 7b					
19								
20								

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6a

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880				(6,755)	-	-
3	390.00	Structures and Improvements	3,349,189				(78,054)	-	(2,575)
4	391.00	Office Furniture and Equipment	997,650				5,995	(2,202)	6,085
5	391.10	Computer Equipment	1,428,345		(670,782)		(12,717)	-	(2,402)
6	392.00	Transportation Equipment	1,797,409				(14,376)	(109)	(3,537)
7	393.00	Stores Equipment	28,727				732	-	59
8	394.00	Tools, Shop and Garage	411,051				1,875	(1,135)	(212)
9	395.00	Laboratory Equipment	130,207				(52)	-	116
10	396.00	Power Operated Equipment	120,325		(799)		3,730	-	(1,226)
11	397.00	Communication Equipment	577,488				(1,313)	-	1,715
12	398.00	Miscellaneous Equipment	277,101	(670)		(39,030)	12,635	(43)	454
13		**Subtotal General**	$ 9,122,373	$ (670)	$ (671,581)	$ (39,030)	$ (88,300)	$ (3,489)	$ (1,523)
14									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights	-	(993)	-	-	-		$ (7,748)	$ (2,868)
3	390.00	Structures and Improvements	(17,341)	(10)	(3,192)	(2,612)	(14,906)		(118,688)	3,230,501
4	391.00	Office Furniture and Equipment	(4,567)	(247)	(2,019)	(906)	(947)		1,191	998,841
5	391.10	Computer Equipment	241	(255)	(556)	-	-		(686,472)	741,874
6	392.00	Transportation Equipment	(5,231)	(404)	(4,372)	148	-		(27,882)	1,769,527
7	393.00	Stores Equipment	(246)	(158)	-	-	-		387	29,114
8	394.00	Tools, Shop and Garage	(1,038)	(270)	(94)	-	-		(874)	410,177
9	395.00	Laboratory Equipment	124	-	-	(727)	(1,015)		(1,554)	128,654
10	396.00	Power Operated Equipment	11	-	-	(82)	-		1,634	121,959
11	397.00	Communication Equipment	(10,889)	(83)	3	-	-		(10,566)	566,923
12	398.00	Miscellaneous Equipment	413	(17)	(609)	11	-		(26,855)	250,246
13		**Subtotal General**	$ (38,523)	$ (2,436)	$ (10,839)	$ (4,168)	$ (16,868)	$ -	$ (877,427)	$ 8,244,946
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 7a

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -				-	-	-
3	390.00	Structures and Improvements	310,963				(14,303)	-	(901)
4	391.00	Office Funiture and Equipment	360,503				3,247	526	6,108
5	391.10	Computer Equipment	(434,702)		(40,657)		5,273	-	118
6	392.00	Transportation Equipment	1,038,162				(9,526)	(109)	(2,171)
7	393.00	Stores Equipment	7,782				357	-	46
8	394.00	Tools, Shop and Garage	18,237				175	442	(60)
9	395.00	Laboratory Equipment	22,954				(18)	-	43
10	396.00	Power Operated Equipment	42,813		(440)		1,414	-	(546)
11	397.00	Communication Equipment	332,600				(1,154)	-	1,730
12	398.00	Miscellaneous Equipment	128,455	(670)		(39,030)	8,302	3,466	213
13		**Subtotal General**	$ 1,827,766	$ (670)	$ (41,096)	$ (39,030)	$ (6,233)	$ 4,325	$ 4,581
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
7b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights	-	-	-	-	-		$ -	$ -
3	390.00	Structures and Improvements	(492)	(2)	(259)	(93)	(529)		(16,579)	294,384
4	391.00	Office Funiture and Equipment	82	(44)	(274)	(80)	(94)		9,471	369,974
5	391.10	Computer Equipment	(9)	(178)	(48)	-	-		(35,499)	(470,201)
6	392.00	Transportation Equipment	(1,564)	(313)	(3,018)	(49)	-		(16,750)	1,021,413
7	393.00	Stores Equipment	5	(48)	-	-	-		359	8,141
8	394.00	Tools, Shop and Garage	(89)	(38)	(19)	-	-		411	18,648
9	395.00	Laboratory Equipment	28	-	-	(58)	(104)		(109)	22,845
10	396.00	Power Operated Equipment	1	-	-	(4)	-		425	43,238
11	397.00	Communication Equipment	(3,485)	(28)	3	-	-		(2,934)	329,666
12	398.00	Miscellaneous Equipment	150	(3)	(213)	0	-		(27,786)	100,670
13		**Subtotal General**	$ (5,372)	$ (654)	$ (3,829)	$ (284)	$ (727)	$ -	$ (88,989)	$ 1,738,777
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona - American Anthem Water
B-3 Adjustments

Exhibit B-4
Page A1
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	B-2 Adjustments	Adjusted Original Cost	O.C. A/D	B-2 Adjustments	O.C. Adjusted A/D
1		**Intangible**						
2	301.00	Organization	-	-	-	-	-	-
3	302.00	Franchises	3,827,476	-	3,827,476	-	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	3,827,476	-	3,827,476	-	-	-
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	5,000	-	5,000	-	-	-
9	311.00	Structures and Improvements	90,181	-	90,181	5,960	-	5,960
10	312.00	Collecting and Impounding Res.	370,979	-	370,979	13,254	-	13,254
11	313.00	Lakes, Rivers, Other Intakes	394,971	-	394,971	21,387	-	21,387
12	314.00	Wells and Springs	461,497	-	461,497	22,685	-	22,685
13		**Subtotal Source of Supply**	1,322,628	-	1,322,628	63,287	-	63,287
14								
15		**Pumping**	-	-	-	-	-	-
16	320.00	Land and Land Rights	20,000	-	20,000	-	-	-
17	321.00	Structures and Improvements	2,057,878	-	2,057,878	72,766	-	72,766
18	323.00	Other Power Production	-	-	-	-	-	-
19	325.00	Electric Pumping Equipment	9,604,435	-	9,604,435	793,757	-	793,757
20	326.00	Diesel Pumping Equipment	-	-	-	-	-	-
21	328.10	Gas Engine Pumping Equipment	1,476	-	1,476	65	-	65
22		**Subtotal Pumping**	11,683,789	-	11,683,789	866,588	-	866,588
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	-	-	-	-	-	-
26	331.00	Structures and Improvements	634,556	-	634,556	5,118	-	5,118
27	332.00	Water Treatment Equipment	4,370,605	-	4,370,605	166,535	-	166,535
28		**Subtotal Water Treatment**	5,005,160	-	5,005,160	171,653	-	171,653
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	-	-	-	-	-	-
32	341.00	Structures and Improvements	18,469	-	18,469	151	-	151
33	342.00	Distribution, Reservoirs, & ST	1,777,969	-	1,777,969	67,634	-	67,634
34	343.00	Transmission and Distribution	15,456,070	-	15,456,070	366,685	-	366,685
35	344.00	Fire Mains	-	-	-	-	-	-
36	345.00	Services	773,445	-	773,445	23,795	-	23,795
37	346.00	Meters	411,258	-	411,258	11,468	-	11,468
38	348.00	Hydrants	618,693	-	618,693	15,871	-	15,871
39	349.00	Other Transmission & Distribution	-	-	-	-	-	-
40		**Subtotal Trans & Dist**	19,055,904	-	19,055,904	485,603	-	485,603
41								
42		**General**						
43	389.00	Land and Land Rights	-	-	-	-	-	-
44	390.00	Structures and Improvements	110,668	-	110,668	3,954	-	3,954
45	391.00	Office Funiture and Equipment	39,073	-	39,073	3,465	-	3,465
46	391.10	Computer Equipment	-	-	-	-	-	-
47	392.00	Transportation Equipment	109,600	-	109,600	10,924	-	10,924
48	393.00	Stores Equipment	-	-	-	-	-	-
49	394.00	Tools, Shop and Garage	4,046	-	4,046	-	-	-
50	395.00	Laboratory Equipment	24,313	-	24,313	1,930	-	1,930
51	396.00	Power Operated Equipment	4,719	-	4,719	234	-	234
52	397.00	Communication Equipment	-	-	-	-	-	-
53	398.00	Miscellaneous Equipment	8,440	-	8,440	144	-	144
54		**Subtotal General**	300,860	-	300,860	20,650	-	20,650
55								
			(148,497)	-	(148,497)	(39,391)	-	(39,391)
			(450,822)	450,822	-	(111,822)	111,822	(0)
		TOTAL WATER PLANT	40,596,498	450,822	41,047,320	1,456,567	111,822	1,568,389

Arizona - American Anthem Water
B-3 Adjustments

Exhibit B-4
Page A2
Witness: Bourassa
(B-3, page 2b, Adj. #9)

Line No.	Account No.	Description	RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted RCN	Adjustment RCN Direct to RCN Rebuttal	Adjusted RCN Rebuttal
1		**Intangible**					
2	301.00	Organization	-	-	-	-	-
3	302.00	Franchises	4,019,354	-	4,019,354	(191,878)	3,827,476
4	303.00	Miscellaneous Intangibles	-	-	-	-	-
5		**Subtotal Intangible**	4,019,354	-	4,019,354	(191,878)	3,827,476
6							
7		**Source of Supply**					
8	310.00	Land and Land Rights	5,519	-	5,519	(519)	5,000
9	311.00	Structures and Improvements	100,469	-	100,469	(2,339)	98,130
10	312.00	Collecting and Impounding Res.	409,486	-	409,486	(28,825)	380,661
11	313.00	Lakes, Rivers, Other Intakes	435,970	-	435,970	(30,689)	405,280
12	314.00	Wells and Springs	509,321	-	509,321	(25,248)	484,073
13		**Subtotal Source of Supply**	1,460,765	-	1,460,765	(87,621)	1,373,144
14							
15		**Pumping**	-	-	-	-	-
16	320.00	Land and Land Rights	20,000	-	20,000	-	20,000
17	321.00	Structures and Improvements	2,268,216	-	2,268,216	(47,823)	2,220,394
18	323.00	Other Power Production	-	-	-	-	-
19	325.00	Electric Pumping Equipment	10,410,980	-	10,410,980	(308,610)	10,102,369
20	326.00	Diesel Pumping Equipment	-	-	-	-	-
21	328.10	Gas Engine Pumping Equipment	1,502	-	1,502	(26)	1,476
22		**Subtotal Pumping**	12,700,698	-	12,700,698	(356,459)	12,344,239
23							
24		**Water Treatment**					
25	330.00	Land and Land Rights	-	-	-	-	-
26	331.00	Structures and Improvements	643,522	-	643,522	(2,038)	641,483
27	332.00	Water Treatment Equipment	4,547,835	-	4,547,835	(69,150)	4,478,684
28		**Subtotal Water Treatment**	5,191,356	-	5,191,356	(71,189)	5,120,167
29							
30		**Transmission and Distribution**					
31	340.00	Land and Land Rights	-	-	-	-	-
32	341.00	Structures and Improvements	20,386	-	20,386	(436)	19,951
33	342.00	Distribution, Reservoirs, & ST	1,962,522	-	1,962,522	(138,148)	1,824,374
34	343.00	Transmission and Distribution	16,558,831	-	16,558,831	(468,957)	16,089,874
35	344.00	Fire Mains	-	-	-	-	-
36	345.00	Services	811,938	-	811,938	(14,039)	797,899
37	346.00	Meters	429,324	-	429,324	(7,735)	421,590
38	348.00	Hydrants	650,577	-	650,577	3,571	654,148
39	349.00	Other Transmission & Distribution	-	-	-	-	-
40		**Subtotal Trans & Dist**	20,433,578	-	20,433,578	(625,743)	19,807,836
41							
42		**General**				**(Common Plant, B-2, Page 6)**	
43	389.00	Land and Land Rights	-	-	-	-	-
44	390.00	Structures and Improvements	122,156	-	122,156	(2,612)	119,544
45	391.00	Office Funiture and Equipment	42,624	-	42,624	(906)	41,718
46	391.10	Computer Equipment	-	-	-	-	-
47	392.00	Transportation Equipment	110,534	-	110,534	148	110,681
48	393.00	Stores Equipment	-	-	-	-	-
49	394.00	Tools, Shop and Garage	4,046	-	4,046	-	4,046
50	395.00	Laboratory Equipment	26,837	-	26,837	(727)	26,110
51	396.00	Power Operated Equipment	4,801	-	4,801	(82)	4,719
52	397.00	Communication Equipment	-	-	-	-	-
53	398.00	Miscellaneous Equipment	8,511	-	8,511	11	8,522
54		**Subtotal General**	319,507	-	319,507	(4,168)	315,339
55							
			(177,260)	-	(177,260)	177,260	-
			(543,736)	543,736	(0)	0	-
		TOTAL WATER PLANT	43,404,261	543,736	43,947,997	(1,159,796)	42,788,201

Arizona - American Anthem Water
B-3 Adjustments

Exhibit B-4
Page A3
Witness: Bourassa

Line No.	Account No.	Description	A/D RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted A/D RCN Rebuttal	Ratio	A/D RCN Rebttual	(B-3, page 3b, Adj. #9) A/D Adjustment Adjusted RCN Direct to RCN Rebuttal
1								
2		**Intangible**						
3	301.00	Organization	-	-	-	-	-	-
4	302.00	Franchises	-	-	-	1.0000	-	-
5	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
6		**Subtotal Intangible**	-	-	-		-	-
7								
8		**Source of Supply**						
9	310.00	Land and Land Rights	-	-	-	1.0000	-	-
10	311.00	Structures and Improvements	6,639	-	6,639	1.0881	6,485	(155)
11	312.00	Collecting and Impounding Res.	14,630	-	14,630	1.0261	13,600	(1,030)
12	313.00	Lakes, Rivers, Other Intakes	23,607	-	23,607	1.0261	21,946	(1,662)
13	314.00	Wells and Springs	25,036	-	25,036	1.0489	23,795	(1,241)
14		**Subtotal Source of Supply**	69,913	-	69,913		65,826	(4,087)
15								
16		**Pumping**	-	-	-	-	-	-
17	320.00	Land and Land Rights	-	-	-	1.0000	-	-
18	321.00	Structures and Improvements	80,204	-	80,204	1.0790	78,513	(1,691)
19	323.00	Other Power Production	-	-	-	-	-	-
20	325.00	Electric Pumping Equipment	860,414	-	860,414	1.0518	834,909	(25,505)
21	326.00	Diesel Pumping Equipment	-	-	-	-	-	-
22	328.10	Gas Engine Pumping Equipment	66	-	66	1.0000	65	(1)
23		**Subtotal Pumping**	940,683	-	940,683		913,486	(27,197)
24								
25		**Water Treatment**						
26	330.00	Land and Land Rights	-	-	-	-	-	-
27	331.00	Structures and Improvements	5,190	-	5,190	1.0109	5,174	(16)
28	332.00	Water Treatment Equipment	173,288	-	173,288	1.0247	170,653	(2,635)
29		**Subtotal Water Treatment**	178,478	-	178,478		175,827	(2,651)
30								
31		**Transmission and Distribution**						
32	340.00	Land and Land Rights	-	-	-	-	-	-
33	341.00	Structures and Improvements	167	-	167	1.0802	163	(4)
34	342.00	Distribution, Reservoirs, & ST	74,654	-	74,654	1.0261	69,399	(5,255)
35	343.00	Transmission and Distribution	393,364	-	393,364	1.0410	381,721	(11,643)
36	344.00	Fire Mains	-	-	-	-	-	-
37	345.00	Services	24,982	-	24,982	1.0316	24,547	(435)
38	346.00	Meters	11,998	-	11,998	1.0251	11,756	(242)
39	348.00	Hydrants	16,689	-	16,689	1.0573	16,780	92
40	349.00	Other Transmission & Distribution	-	-	-	-	-	-
41		**Subtotal Trans & Dist**	521,854	-	521,854		504,367	(17,487)
42								
43		**General**						**(Common Plant, B-2, Page 7)**
44	389.00	Land and Land Rights	-	-	-	-	-	-
45	390.00	Structures and Improvements	4,364	-	4,364	1.0802	4,271	(93)
46	391.00	Office Funiture and Equipment	3,779	-	3,779	1.0677	3,699	(80)
47	391.10	Computer Equipment	-	-	-	-	-	-
48	392.00	Transportation Equipment	11,080	-	11,080	1.0099	11,032	(49)
49	393.00	Stores Equipment	-	-	-	-	-	-
50	394.00	Tools, Shop and Garage	-	-	-	1.0000	-	-
51	395.00	Laboratory Equipment	2,130	-	2,130	1.0739	2,072	(58)
52	396.00	Power Operated Equipment	238	-	238	1.0000	234	(4)
53	397.00	Communication Equipment	-	-	-	-	-	-
54	398.00	Miscellaneous Equipment	145	-	145	1.0097	146	0
55		**Subtotal General**	21,738	-	21,738		21,454	(284)
			(47,020)	-	(47,020)	-	-	47,020
			(134,869)	134,869	0	-	-	(0)
		TOTAL WATER PLANT	1,550,777	134,869	1,685,646		1,680,959	(4,687)

10/09/2003

Trended RCN
Handy-Whitman

Exhibit
Schedule B-4
Page 1
Witness: Bourassa

Company Code: 4023 Business Area: 4538 Anthem Water (Treatco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W30200	FRANCH/CONSENTS		1999	1,747,694	180.2	167.8	1.0739	1,876,849	1,747,694
W30200	FRANCH/CONSENTS		2001	1,978,943	180.2	180.2	1.0000	1,978,943	1,978,943
		W30200	Class Totals	3,726,638				3,855,793	3,726,638
W31000	LAND/LAND RIGHTS		1999	5,000	180.2	167.8	1.0739	5,369	5,000
		W31000	Class Totals	5,000				5,369	5,000
W31100	STRUCT AND IMPROV		1999	99,114	350.0	324.0	1.0802	107,063	107,063
W31100	STRUCT AND IMPROV		2001	-8,933	350.0	350.0	1.0000	-8,933	-8,933
		W31100	Class Totals	90,181				98,130	98,130
W31200	COL/IMPOUND RESER		1999	370,978	275.0	268.0	1.0261	380,661	380,661
		W31200	Class Totals	370,978				380,661	380,661
W31300	LK/RIVER/OTH INTAKES		1999	394,971	275.0	268.0	1.0261	405,280	405,280
		W31300	Class Totals	394,971				405,280	405,280
W31400	WELLS AND SPRINGS		1999	460,731	321.0	306.0	1.0490	483,307	483,307

Company Code: 4023 Business Area: 4538 Anthem Water (Treatco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W31400	WELLS AND SPRINGS		2001	765	321.0	321.0	1.0000	765	765
	W31400	Class Totals		461,496				484,072	484,072
W32000	LAND/LAND RIGHTS		2001	20,000	180.2	180.2	1.0000	20,000	20,000
	W32000	Class Totals		20,000				20,000	20,000
W32100	STRUCT AND IMPROV		1999	2,026,379	350.0	324.0	1.0802	2,188,895	2,188,895
W32100	STRUCT AND IMPROV		2001	31,498	350.0	350.0	1.0000	31,498	31,498
	W32100	Class Totals		2,057,878				2,220,393	2,220,393
W32500	ELEC PUMP EQUIP		1999	7,768,122	531.0	499.0	1.0641	8,266,058	8,266,058
W32500	ELEC PUMP EQUIP		2000	1,173	531.0	532.0	0.9981	1,171	1,171
W32500	ELEC PUMP EQUIP		2001	9,900	531.0	531.0	1.0000	9,900	9,900
W32500	ELEC PUMP EQUIP		2001	1,825,238	531.0	531.0	1.0000	1,825,238	1,825,238
	W32500	Class Totals		9,604,434				10,102,369	10,102,369
W32810	OTHER PUMP EQUIPMNT		2001	1,475	531.0	531.0	1.0000	1,475	1,475
	W32810	Class Totals		1,475				1,475	1,475

Company Code: 4023 Business Area: 4538 Anthem Water (Treatco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W33100	WATER TREAT EQUIP STRUCT &		1999	86,374	350.0	324.0	1.0802	93,301	93,301
W33100	WATER TREAT EQUIP STRUCT &		2001	548,181	350.0	350.0	1.0000	548,181	548,181
		W33100	Class Totals	634,555				641,483	641,483
W33200	WATER TREAT EQUIP		1999	1,707,417	403.0	379.0	1.0633	1,815,497	1,815,497
W33200	WATER TREAT EQUIP		2001	2,663,186	403.0	403.0	1.0000	2,663,186	2,663,186
		W33200	Class Totals	4,370,604				4,478,684	4,478,684
W34100	STRUCT AND IMPROV		1999	18,469	350.0	324.0	1.0802	19,950	19,950
		W34100	Class Totals	18,469				19,950	19,950
W34200	DIST RESRV & STNDPIP		1999	1,777,968	275.0	268.0	1.0261	1,824,373	1,824,373
		W34200	Class Totals	1,777,968				1,824,373	1,824,373
W34300	TRANS/DISTR		1999	8,533,458	324.0	306.0	1.0588	9,035,226	9,035,226
W34300	TRANS/DISTR		2001	12,400	324.0	320.0	1.0125	12,555	12,555
W34300	TRANS/DISTR		2001	2,863,658	324.0	324.0	1.0000	2,863,658	2,863,658
		W34300	Class Totals	11,409,517				11,911,439	11,911,439

Company Code: 4023 Business Area: 4538 Anthem Water (Treatco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34500	SERVICES		1999	3,000	288.0	274.0	1.0511	3,153	3,153
W34500	SERVICES		2001	8,900	288.0	288.0	1.0000	8,900	8,900
		W34500	Class Totals	11,900				12,053	12,053
W34600	METERS		2001	27,515	350.0	350.0	1.0000	27,515	27,515
		W34600	Class Totals	27,515				27,515	27,515
W39000	MISC STRUCTURES		1999	110,668	350.0	324.0	1.0802	119,543	119,543
		W39000	Class Totals	110,668				119,543	119,543
W39100	OFFICE FURN/EQUIP		1999	31,682	180.2	167.8	1.0739	34,023	34,023
W39100	OFFICE FURN/EQUIP		2000	7,391	180.2	173.1	1.0410	7,694	7,694
		W39100	Class Totals	39,073				41,717	41,717
W39200	TRANSPORT EQUIP		2001	64,439	180.2	180.2	1.0000	64,439	64,439
		W39200	Class Totals	64,439				64,439	64,439
W39400	TOOLS AND WORK EQUIP		2001	4,045	180.2	180.2	1.0000	4,045	4,045

	W39400	Class Totals	4,045				4,045	4,045
W39500	LAB EQUIP	1999	24,312	180.2	167.8	1.0739	26,109	26,109
	W39500	Class Totals	24,312				26,109	26,109
W39600	PWR OPER EQUIP	2001	4,718	180.2	180.2	1.0000	4,718	4,718
	W39600	Class Totals	4,718				4,718	4,718
W39800	MISC EQUIP	2000	1,993	180.2	173.1	1.0410	2,074	2,074
W39800	MISC EQUIP	2001	6,447	180.2	180.2	1.0000	6,447	6,447
	W39800	Class Totals	8,440				8,521	8,521
Company Code:	4023	Business Area: 4538	35,239,286				36,758,143	36,628,619

Company Code: 4024 Business Area: 4540 Anthem Water (Distco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W30200	FRANCH/CONSENTS		1999	100,837	180.2	167.8	1.0739	108,289	100,837
		W30200	Class Totals	100,837				108,289	100,837
W34300	TRANS/DISTR		1999	1,503,731	324.0	306.0	1.0588	1,592,150	1,592,150
W34300	TRANS/DISTR		2000	1,015,113	324.0	316.0	1.0253	1,040,795	1,040,795
W34300	TRANS/DISTR		2001	1,422,403	324.0	320.0	1.0125	1,440,183	1,440,183
W34300	TRANS/DISTR		2001	105,304	324.0	324.0	1.0000	105,304	105,304
		W34300	Class Totals	4,046,552				4,178,434	4,178,434
W34500	SERVICES		1999	250,302	288.0	274.0	1.0511	263,093	263,093
W34500	SERVICES		2000	283,408	288.0	278.0	1.0360	293,611	293,611
W34500	SERVICES		2001	124,588	288.0	285.0	1.0105	125,897	125,897
W34500	SERVICES		2001	103,244	288.0	288.0	1.0000	103,244	103,244
		W34500	Class Totals	761,544				785,846	785,846
W34600	METERS		1999	146,495	350.0	332.0	1.0542	154,435	154,435
W34600	METERS		2000	69,947	350.0	339.0	1.0324	72,213	72,213
W34600	METERS		2001	22,100	350.0	348.0	1.0057	22,225	22,225
W34600	METERS		2001	145,199	350.0	350.0	1.0000	145,199	145,199
		W34600	Class Totals	383,741				394,074	394,074

Company Code: 4024 Business Area: 4540 Anthem Water (Distco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
W34800	HYDRANTS		1999	196,028	527.0	484.0	1.0888	213,435	213,435
W34800	HYDRANTS		2000	240,808	527.0	498.0	1.0582	254,824	254,824
W34800	HYDRANTS		2001	173,051	527.0	515.0	1.0233	177,083	177,083
W34800	HYDRANTS		2001	8,804	527.0	527.0	1.0000	8,804	8,804
		W34800	Class Totals	618,693				654,147	654,147
W39200	TRANSPORT EQUIP		2000	26,361	180.2	173.1	1.0410	27,442	27,442
W39200	TRANSPORT EQUIP		2001	18,798	180.2	180.2	1.0000	18,798	18,798
		W39200	Class Totals	45,160				46,241	46,241
Company Code:	4024	Business Area:	4540	5,956,530				6,167,033	6,159,581

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 1
Witness: Bourassa

Line No.		Direct Test Year Adjusted Results	Label	Adjustment	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	**Revenues**						
2	Metered Water Revenues	$ 2,060,418			$ 2,060,418	18,658	$ 2,079,076
3	Unmetered Water Revenues	-			-		-
4	Other Water Revenues	1,950,387			1,950,387	-	1,950,387
5		$ 4,010,805		$ -	$ 4,010,805	$ 18,658	$ 4,029,463
6	**Operating Expenses**						
7	Salaries and Wages	$ 585,309	1/6	(169,657)	$ 415,652		$ 415,652
8	Purchased Water	211,055	11	(39,000)	172,055		172,055
9	Purchased Power	264,489			264,489		264,489
10	Chemicals	95,282			95,282		95,282
11	Repairs and Maintenance	130,909			130,909		130,909
12	Office Supplies and Expense	74,576	7	(8,106)	66,470		66,470
13	Outside Services	27,139			27,139		27,139
14	Service Company Charges	472,080	10	(15,778)	456,302		456,302
15	Water Testing	1,193			1,193		1,193
16	Rents	18,568			18,568		18,568
17	Transportation Expenses	-			-		-
18	Insurance - General Liability	17,095	8	(496)	16,600		16,600
19	Insurance - Health and Life	-			-		-
20	Regulatory Commission Expense - Rate Case	26,471			26,471		26,471
21	Miscellaneous Expense	172,138	9	(114)	172,024		172,024
22	Depreciation Expense	912,406	3	5,572	917,978		917,978
23	Taxes Other Than Income	31,169	2	(6,123)	25,046		25,046
24	Property Taxes	225,131	4	(3,355)	221,776		221,776
25	Income Tax	168,280		102,723	271,002		278,204
26					-		-
27	**Total Operating Expenses**	$ 3,433,290		$ (134,335)	$ 3,298,956	$ -	$ 3,306,157
28	**Operating Income**	$ 577,515		$ 134,335	$ 711,849	$ 18,658	$ 723,305
29	**Other Income (Expense)**						
30	Interest Income				-		-
31	Other income				-		-
32	Interest Expense	(309,824)	5	29,071	(280,752)		(280,752)
33	Other Expense	-			-		-
34	Gain/Loss Sale of Fixed Assets	-			-		-
35	**Total Other Income (Expense)**	$ (309,824)		$ 29,071	$ (280,752)	$ -	$ (280,752)
36	**Net Profit (Loss)**	$ 267,691		$ 163,406	$ 431,097	$ 18,658	$ 442,553
37							
38	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
39	Rebuttal C-2				Rebuttal A-1		
40							
41							

Arizona American
Summary of Rebuttal Adjustments
Test Year December 31, 2001

Exhibit
Rebuttal Schedule C-2
Witness: Bourassa
Page1

	Water/ Sewer Label	Description	Anthem Water
Revenues			
Revenues		None	
Other Revenues		None	
			$ -
Operating Expenses			
Salaries and Wages	1	Adjust to Actual 2002 Wages	$ (66,858)
	6	Adjust to Actual 2002 Additional (Corporate)	(102,799)
Purchased Water	11	Adjust to annualized 2001 qty ordered	
Purchased Wastewater Treatment		None	
Purchased Power		None	
Fuel for Power Production			
Chemicals		None	
Materials ans Supplies		None	
Repairs and Maintenance		None	
Office Supplies and Expense	7		
		Adjust to Actual 2002 Additional (Corporate)	(8,106)
Outside Services			
Service Company Charges	10	Adjust to Actual 2002 Service Company Charges	(15,778)
Water Testing		None	
Rents		None	
Transportation Expenses			
Insurance - General Liability	8		
		Adjust to Actual 2002 Additional (Corporate)	(496)
Insurance - Health and Life		None	
Rate Case Expense		None	
Miscellaneous Expense	9		
		Adjust to Actual 2002 Additional (Corporate)	(114)
Depreciation Expense	3	Depreciation Expense	5,572
Taxes Other Than Income	2	Adjust to 2002 PR Tax based on Actual Wages	(6,123)
Property Taxes	4	Property Taxes	(3,355)
Income Tax			102,723
Tolleson Wastewater User Fees		None	
Total Operating Expenses			$ (95,335)
Operating Income			$ 95,335

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line No.		Amount
1	Projected Salaries & Wages and Related Expenses	
2		
3	Actual 2002 Wages and Salaries	
4	0 Salaries & Wages	$ 302,138
5		
6	Direct Filing Proposed Wages and Salaries	
7	0 Salaries & Wages	368,996
8		
9	Increase (Decrease)	$ (66,858)
10		
11	Adjustment to Revenues and/or Expenses	$ (66,858)
12		
13		
14		
15		

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line No.		
1	Projected Salaries & Wages and Related Expenses	
2		
3	PR Taxes Based on Actual 2002 Wages and Salaries	**Amount**
4	# Taxes Other Than Income	25,046
5		
6	Direct Filing Proposed PR Taxes	
7	# Taxes Other Than Income	31,169
8		
9	Increase (Decrease)	$ (6,123)
10		
11	Adjustment to Revenues and/or Expenses	$ (6,123)
12		
13		
14		
15		

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Rebuttak Original Cost	Rate	Depreciation Expense
1	Depreciation Expense				
2					
3		**Intangible**			
4	301.00	Organization	$ -	0.00%	$ -
5	302.00	Franchises	3,827,476	0.00%	-
6	303.00	Miscellaneous Intangibles	-	0.00%	-
7		**Subtotal Intangible**	$ 3,827,476		$ -
8					
9		**Source of Supply**			
10	310.00	Land and Land Rights	$ 5,000	0.00%	$ -
11	311.00	Structures and Improvements	212,175	2.50%	5,304
12	312.00	Collecting and Impounding Res.	370,979	2.50%	9,274
13	313.00	Lakes, Rivers, Other Intakes	394,971	2.50%	9,874
14	314.00	Wells and Springs	461,497	2.52%	11,630
15		**Subtotal Source of Supply**	$ 1,444,622		$ 36,083
16					
17		**Pumping**			
18	320.00	Land and Land Rights	$ 20,000	0.00%	$ -
19	321.00	Structures and Improvements	2,057,878	1.67%	34,367
20	323.00	Other Power Production	-	0.00%	-
21	325.00	Electric Pumping Equipment	9,608,437	4.42%	424,693
22	326.00	Diesel Pumping Equipment	-	4.42%	-
23	328.10	Gas Engine Pumping Equipment	1,476	4.42%	65
24		**Subtotal Pumping**	$ 11,687,791		$ 459,125
25					
26		**Water Treatment**			
27	330.00	Land and Land Rights	$ -	0.00%	$ -
28	331.00	Structures and Improvements	634,556	1.67%	10,597
29	332.00	Water Treatment Equipment	4,378,548	4.00%	175,142
30		**Subtotal Water Treatment**	$ 5,013,104		$ 185,739
31					
32		**Transmission and Distribution**			
33	340.00	Land and Land Rights	$ -	0.00%	$ -
34	341.00	Structures and Improvements	18,469	0.00%	-
35	342.00	Distribution, Reservoirs, & ST	1,882,332	1.67%	31,435
36	343.00	Transmission and Distribution	15,456,070	1.53%	236,478
37	344.00	Fire Mains	-	0.00%	-
38	345.00	Services	773,445	2.48%	19,181
39	346.00	Meters	411,258	2.51%	10,323
40	348.00	Hydrants	618,693	2.00%	12,374
41	349.00	Other Transmission & Distribution	-	0.00%	-
42		**Subtotal Transmission and Distribution**	$ 19,160,267		$ 309,791
43					
44		**General**			
45	389.00	Land and Land Rights	$ 171	0.00%	$ -
46	390.00	Structures and Improvements	117,574	1.68%	1,976
47	391.00	Office Funiture and Equipment	57,876	4.55%	2,631
48	391.10	Computer Equipment	59,753	4.55%	2,716
49	392.00	Transportation Equipment	90,271	25.00%	22,568
50	393.00	Stores Equipment	1,008	3.92%	40
51	394.00	Tools, Shop and Garage	14,430	4.14%	597
52	395.00	Laboratory Equipment	6,621	3.71%	246
53	396.00	Power Operated Equipment	4,201	5.14%	216
54	397.00	Communication Equipment	32,468	10.28%	3,337
55	398.00	Miscellaneous Equipment	9,196	4.98%	458
56		**Subtotal General**	$ 393,569		$ 34,783
57					
58					
59					
60					
61		TOTALS	$ 41,526,830	2.4695%	$ 1,025,520
62					
63	Amortization of Deferred Regulatory Assets		$ -	2.4695%	-
64					
65	Less: Amotization of Contributions		$ 1,075,425	10.0000%	(107,542)
66	Rebuttal Depreciation Expense				$ 917,978
67					
68	Direct Filing Depreciation Expense				912,406
69					
70	Increase (decrease) in Depreciation Expense				5,572
71					
72	Adjustment to Revenues and/or Expenses				$ 5,572
73					

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line No.		
1	Adjust Property Taxes to Reflect Proposed Revenues:	
2		
3	Rebuttal Adjusted Revenues in year ended 12/31/01	$ 4,010,805
4	Rebuttal Adjusted Revenues in year ended 12/31/01	4,010,805
5	Proposed Revenues	4,029,463
6	Average of three year's of revenue	$ 4,017,024
7	Average of three year's of revenue, times 2	8,034,048
8	Add:	
9	Construction Work in Progess at 10%	
10	Deduct:	
11	Book Value of Transportation Equipment	90,271
12	Book Value of Transportation Equipment (proforma)	-
13	Total Book Value of Transportation Equipment	$ 90,271
14		
15	Full Cash Value	$ 7,943,778
16	Assessment Ratio	25%
17	Assessed Value	1,985,944
18	Property Tax Rate	11.167304%
19		
20	Property Tax	221,776
21	Tax on Parcels	0
22		
23	Total Rebuttal Property Tax at Proposed Rates	$ 221,776
24	Direct Filing Proposed Property Taxes	225,131
25	Increase (Decrease) in Property Taxes	$ (3,355)
26		
27		
28	Adjustment to Revenues and/or Expenses	$ (3,355)
29		
30		

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line No.		
1	Interest Synchronization with Rate Base	
2		
3	Rebuttal Fair Value Rate Base	$9,627,995
4	Weigted Cost of Debt from Schedule D-1	2.92%
5	Rebuttal Synchronized Interest Expense	280,752
6	Direct Filing Interest Expense	309,824
7	Increase in Interest Expense	$ (29,071)
8		
9	Adjustment to Revenues and/or Expense	$ (29,071)
10		
11		

Arizona American - Anthem Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
Page 7
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Wages Expense (Corporate)	$	113,513
5			
6	Direct Filing Proposed Additonal Wages Expense (Corpora		216,313
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(102,799)
10			
11	Adjustment to Revenue and/or Expense	$	(102,799)
12			
13			
14			
15			

Arizona American - Anthem Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Office Expense (Corporate)	$	55,279
5			
6	Direct Filing Proposed Additonal Office Expense (Corporat		63,385
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(8,106)
10			
11	Adjustment to Revenue and/or Expense	$	(8,106)
12			
13			
14			
15			

Arizona American - Anthem Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
Page 9
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Insurance Expense (Corporate)	$	16,502
5			
6	Direct Filing Proposed Additonal Insurance Expense (Corp		16,997
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(496)
10			
11	Adjustment to Revenue and/or Expense	$	(496)
12			
13			
14			
15			

Arizona American - Anthem Water
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 9

Exhibit
Rebuttal Schedule C-2
Page 10
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Misc. Expense (Corporate)	$	4,185
5			
6	Direct Filing Proposed Additonal Misc. Expense (Corporate		4,300
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(114)
10			
11	Adjustment to Revenue and/or Expense	$	(114)
12			
13			
14			
15			

Arizona American - Anthem Water
Test Year Ending December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 10

Exhibit
Schedule C-2
Page 11
Witness: Bourassa

Line No.			
1	Service Company Charges		
2			
3	Total 2002 Charges	$ 4,981,460	
4	Allocation Factor (4 factor Formula)	0.0916	
5	Total Charges		$ 456,302
6			
7			
8	Direct Filing Proposed Charges	$ 5,153,711	
9	Allocation Factor (4 factor Formula)	0.0916	
10	Total Charges		472,080
11			
12			
13	Adjustment to Revenues and/or Expenses		$ (15,778)
14			
15			
16			
17			

Arizona American - Anthem Water
Test Year Ended December 31, 2001
Summary of Cost of Capital

Exhibit
Rebuttal Schedule D-1
Page 1
Witness: Stephenson

Line No.	Item of Capital	End of Test Year Percent of Total	(e) Cost Rate	Weighted Cost	End of Projected Year Percent of Total	(e) Cost Rate	Weighted Cost
1	Long-Term Debt	60.00%	4.86%	2.92%	60.00%	4.86%	2.92%
2							
3	Stockholder's Equity (c)	40.00%	11.50%	4.60%	40.00%	11.50%	4.60%
4							
5	Totals	100.00%		7.52%	100.00%		7.52%
6							
7							
8	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							

ANTHEM/AGUA FRIA WASTEWATER

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

Line No.		
1	Fair Value Rate Base	$ 2,789,661
2		
3	Adjusted Operating Income	10,786
4		
5	Current Rate of Return	0.39%
6		
7	Required Operating Income	$ 209,671
8		
9	Required Rate of Return on Fair Value Rate Base	7.52%
10		
11	Operating Income Deficiency	$ 198,885
12		
13	Gross Revenue Conversion Factor	1.6286
14		
15	Increase in Gross Revenue	
16	Requirement	$ 323,911

17					
18	Customer	Present	Proposed	Dollar	Percent
19	Classification	Rates	Rates	Increase	Increase
20	Residential	$ 650,824	$ 897,893	$ 247,069	37.96%
21	Small Commercial 5/8 Inch Meter	1,501	2,071	570	37.95%
22	Small Commercial 3/4 Inch Meter	-	-	-	0.00%
23	Small Commercial 1 Inch Meter	-	-	-	0.00%
24	Large Commercial	29,477	40,667	11,190	37.96%
25	Revenues from Treatco excluding Annualization	11,231	11,231	-	0.00%
26	Miscellaneous Revenues	986,072	986,072	-	0.00%
27	Subtotal of Revenues	$ 1,679,105	$ 1,937,934	$ 258,829	15.41%
28					
29	**Revenue Annualization**				
30	Treatco Revenue Annualization	13,480	13,480	-	0.00%
31	Residential	167,515	231,113	63,598	37.97%
32	Small Commercial 5/8 Inch Meter	(841)	(1,160)	(319)	37.96%
33	Small Commercial 3/4 Inch Meter	-	-	-	0.00%
34	Small Commercial 1 Inch Meter	-	-	-	0.00%
35	Large Commercial	3,930	5,422	1,492	37.96%
36	Total Revenue Annualization	184,083	248,853	64,771	35.19%
37	Total Revenues with Revenue Annualization	1,863,188	2,186,787	323,599	17.37%
38					
39	SUPPORTING SCHEDULES:				
40	Rebuttal B-1				
41	Rebuttal C-1				
42	Rebuttal D-1				
43	Rebuttal H-1				

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Summary of Fair Value Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	RCND Rate base	Fair Value Rate base (RCND Only)
1				
2	Gross Utility Plant in Service	$ 23,036,402	$ 23,671,364	$ 23,671,364
3	Less: Accumulated Depreciation	787,791	826,446	826,446
4				
5	Net Utility Plant in Service	$ 22,248,611	$ 22,844,918	$ 22,844,918
6				
7	Less:			
8	Advances in Aid of			
9	Construction	19,045,098	19,570,045	19,570,045
10	Contributions in Aid of			
11	Construction - Net of amortization	472,196	485,212	485,212
12	Customer Meter Deposits	-	-	-
13	Deferred Income Taxes & Credits	-	-	-
14	Investment tax Credits	-	-	-
15	Plus:			
16	Deferred Finance			
17	Charges	-	-	-
18	Deferred Tax Assets	-	-	-
19	Allowance for Working Capital	-	-	-
20	Citizens Acquisition Adjustment	6,087,822	-	-
21				
22	Total Rate Base	$ 8,819,139	$ 2,789,661	$ 2,789,661
23				
24				
25				
26	SUPPORTING SCHEDULES:		RECAP SCHEDULES:	
27	Rebuttal B-2		Rebuttal A-1	
28	Rebuttal B-3			
29				
30				
31				

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Original Cost Rate Base Proforma Adjustments

Exhibit
Schedule B-2
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Label	Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 23,053,411	(1)	(17,008)	$ 23,036,402
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	789,221	(2)	(1,430)	787,791
8					
9	Net Utility Plant				
10	in Service	$ 22,264,190			$ 22,248,611
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	19,045,098			19,045,098
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	472,196			472,196
18	Purposes Only)				
19	Customer Meter Deposits	-			-
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Deferred Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	6,134,972	(3)	(47,150)	6,087,822
28					
29	Total	$ 8,881,868			$ 8,819,139
30					
31					
32	(1) See Rebuttal B-2, Page 2				
33	(2) See Rebuttal B-2, Page 3				
34	(3) See Rebuttal B-2, Page 4				
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					

Arizona American - Anthem/Agua Fria Wastwater
Plant Summary
December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ -	$ -	$ -	$ -	$ -	$ -
3	302.00	Franchises	249,528	-	249,528	-	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	$ 249,528	$ -	$ 249,528	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 336,560	$ -	$ 336,560	$ -	$ -	$ -
9	311.00	Structures and Improvements	2,400	1,379	3,779	-	-	-
10	312.00	Preliminary Treatment	828,719	1,208	829,927	657	-	657
11	313.00	Primary Treatment Equipment	-	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	2,062,401	-	2,062,401	49,790	-	49,790
13	315.00	Tertiary Equipment	8,731,796	-	8,731,796	427,454	-	427,454
14	316.00	Disinfection Equipment	891,776	-	891,776	5,739	-	5,739
15	317.00	Effluent Lift Station E	813,270	-	813,270	1,778	-	1,778
16	318.00	Outfall Line	-	-	-	-	-	-
17	319.00	Sludge, Treatment & Distribution	-	-	-	19,349	-	19,349
18	321.00	Influent Lift Station	5,000	2,463	7,463	-	-	-
19	322.00	General Treatment Equipment	83,108	-	83,108	6,855	-	6,855
20		**Subtotal Treatment & Discharge**	$ 13,755,029	$ 5,050	$ 13,760,079	$ 511,621	$ -	$ 511,621
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
24	341.00	Structures and Improvements	-	-	-	-	-	-
25	342.00	Collection System Lift	140,048	4,940	144,988	19,590	-	19,590
26	343.00	Collection Mains	7,425,126	-	7,425,126	138,243	-	138,243
27	344.00	Force Mains	1,918	-	1,918	-	-	-
28	345.00	Discharge Services	1,170,937	-	1,170,937	29,438	-	29,438
29	348.00	Manholes	-	-	-	40,395	-	40,395
30		**Subtotal Collection and Influent**	$ 8,738,028	$ 4,940	$ 8,742,968	$ 227,666	$ -	$ 227,666
31								
32		**General**						
33	389.00	Land and Land Rights	$ 133	$ -	$ 133	$ -	$ -	$ -
34	390.00	Structures and Improvements	91,498	-	91,498	8,495	-	8,495
35	391.00	Office Funiture and Equipment	46,755	(2,842)	43,914	9,849	-	9,849
36	391.10	Computer Equipment	69,974	(16,608)	53,365	(11,876)	(1,006)	(12,882)
37	392.00	Transportation Equipment	49,104	-	49,104	28,362	-	28,362
38	393.00	Stores Equipment	785	-	785	213	-	213
39	394.00	Tools, Shop and Garage	16,457	(5,227)	11,230	498	-	498
40	395.00	Laboratory Equipment	5,284	(1,727)	3,557	627	-	627
41	396.00	Power Operated Equipment	3,287	(18)	3,269	1,170	(10)	1,160
42	397.00	Communication Equipment	15,777	4,038	19,814	9,086	-	9,086
43	398.00	Miscellaneous Equipment	11,770	(4,614)	7,157	3,509	(414)	3,096
44		**Subtotal General**	$ 310,826	$ (26,999)	$ 283,827	$ 49,934	$ (1,430)	$ 48,504
45								
46				-	-	-	-	-
47				-	-	-	-	-
48		TOTAL WASTEWATER PLANT	$ 23,053,411	$ (17,008)	$ 23,036,403	$ 789,221	$ (1,430)	$ 787,791
49								
50		SUPPORTING SCHEDULES:						
51		Rebuttal B-2, page 2a, 2b, 3a, 3b						
52								
53								

Arizona American
Agua Fria/Anthem Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Blank Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					$ -
3	302.00	Franchises	249,528					-
4	303.00	Miscellaneous Intangibles	-					-
5		**Subtotal Intangible**	$ 249,528	$ -	$ -	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 336,560					$ -
9	311.00	Structures and Improvements	2,400					1,379
10	312.00	Preliminary Treatment	828,719					1,208
11	313.00	Primary Treatment Equipment	-					-
12	314.00	Secondary Treatment Equipment	2,062,401					-
13	315,00	Tertiary Equipment	8,731,796					-
14	316.00	Disinfection Equipment	891,776					-
15	317.00	Effluent Lift Station E	813,270					-
16	318.00	Outfall Line	-					-
17	319.00	Sludge, Treatment & Distribution	-					-
18	321.00	Influent Lift Station	5,000					2,463
19	322.00	General Treatment Equipment	83,108					-
20		**Subtotal Treatment & Dis.**	$ 13,755,029	$ -	$ -	$ -	$ -	$ 5,050
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -					$ -
24	341.00	Structures and Improvements	-					-
25	342.00	Collection System Lift	140,048					4,940
26	343.00	Collection Mains	7,425,126					-
27	344.00	Force Mains	1,918					-
28	345.00	Discharge Services	1,170,937					-
29	348.00	Manholes	-					-
30		**Subtotal Collection and Infl.**	$ 8,738,028	$ -	$ -	$ -	$ -	$ 4,940
31								
32		**General**						
33	389.00	Land and Land Rights	$ 133					$ -
34	390.00	Structures and Improvements	91,498					-
35	391.00	Office Funiture and Equipment	46,755					(2,842)
36	391.10	Computer Equipment	69,974					-
37	392.00	Transportation Equipment	49,104					-
38	393.00	Stores Equipment	785					-
39	394.00	Tools, Shop and Garage	16,457					(5,227)
40	395.00	Laboratory Equipment	5,284					(1,727)
41	396.00	Power Operated Equipment	3,287					-
42	397.00	Communication Equipment	15,777					4,038
43	398.00	Miscellaneous Equipment	11,770					(4,200)
44		**Subtotal General**	$ 310,826	$ -	$ -	$ -	$ -	$ (9,958)
45								
46			-					
47			-					
48		TOTAL WASTEWATER PLANT	$ 23,053,411	$ -	$ -	$ -	$ -	$ 32
49								

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decisio	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American
Agua Fria/Anthem Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	Blank AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Original Cost
1		**Intangible**							
2	301.00	Organization						$ -	$ -
3	302.00	Franchises						-	249,528
4	303.00	Miscellaneous Intangibles						-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ 249,528
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights						$ -	$ 336,560
9	311.00	Structures and Improvements						1,379	3,779
10	312.00	Preliminary Treatment						1,208	829,927
11	313.00	Primary Treatment Equipment						-	-
12	314.00	Secondary Treatment Equipment						-	2,062,401
13	315.00	Tertiary Equipment						-	8,731,796
14	316.00	Disinfection Equipment						-	891,776
15	317.00	Effluent Lift Station E						-	813,270
16	318.00	Outfall Line						-	-
17	319.00	Sludge, Treatment & Distribution						-	-
18	321.00	Influent Lift Station						2,463	7,463
19	322.00	General Treatment Equipment						-	83,108
20		**Subtotal Treatment & Dis.**	$ -	$ -	$ -	$ -	$ -	$ 5,050	$ 13,760,079
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights							$ -
24	341.00	Structures and Improvements						-	-
25	342.00	Collection System Lift						4,940	144,988
26	343.00	Collection Mains						-	7,425,126
27	344.00	Force Mains						-	1,918
28	345.00	Discharge Services						-	1,170,937
29	348.00	Manholes						-	-
30		**Subtotal Collection and Infl.**	$ -	$ -	$ -	$ -	$ -	$ 4,940	$ 8,742,968
31									
32		**General**							
33	389.00	Land and Land Rights			$ -			$ -	$ 133
34	390.00	Structures and Improvements			-			-	91,498
35	391.00	Office Funiture and Equipment			-			(2,842)	43,914
36	391.10	Computer Equipment			(16,608)			(16,608)	53,365
37	392.00	Transportation Equipment			-			-	49,104
38	393.00	Stores Equipment			-			-	785
39	394.00	Tools, Shop and Garage			-			(5,227)	11,230
40	395.00	Laboratory Equipment			-			(1,727)	3,557
41	396.00	Power Operated Equipment			(18)			(18)	3,269
42	397.00	Communication Equipment			-			4,038	19,814
43	398.00	Miscellaneous Equipment			(414)			(4,614)	7,157
44		**Subtotal General**	$ -	$ -	$ (17,040)	$ -	$ -	$ (26,999)	$ 283,827
45									
46									-
47								-	-
48		TOTAL WASTEWATER PLANT	$ -	$ -	$ (17,040)	$ -	$ -	$ (17,008)	$ 23,036,403
49									
50									
51									
52									
53									
54									
55									
56									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American - Agua Fria Water
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Not Used Adjustment 1	Blank Unidentifies Adjustment 2	Blank Mispost Adjustment 3	Blank Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					
3	302.00	Franchises	-					
4	303.00	Miscellaneous Intangibles	-					
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Source of Supply**						
8	310.00	Land and Land Rights	$ -					
9	311.00	Structures and Improvements	57,920					
10	312.00	Collecting and Impounding Res.	-					
11	313.00	Lakes, Rivers, Other Intakes	-					
12	314.00	Wells and Springs	334,959					
13		**Subtotal Source of Supply**	$ 392,879	$ -	$ -	$ -	$ -	$ -
14								
15		**Pumping**						
16	320.00	Land and Land Rights	$ -	-				
17	321.00	Structures and Improvements	54,255	(11,196)				
18	323.00	Other Power Production	-	-				
19	325.00	Electric Pumping Equipment	1,984,180	(15,122)				
20	326.00	Diesel Pumping Equipment	19,386	-				
21	328.10	Gas Engine Pumping Equipment	308	-				
22		**Subtotal Pumping**	$ 2,058,130	$ (26,318)	$ -	$ -	$ -	$ -
23								
24		**Water Treatment**						
25	330.00	Land and Land Rights	$ -					
26	331.00	Structures and Improvements	3,430	-				
27	332.00	Water Treatment Equipment	48,501	(3,442)				
28		**Subtotal Water Treatment**	$ 51,931	$ (3,442)	$ -	$ -	$ -	$ -
29								
30		**Transmission and Distribution**						
31	340.00	Land and Land Rights	$ -					
32	341.00	Structures and Improvements	-	-				
33	342.00	Distribution, Reservoirs, & ST	20,686	(34,414)				
34	343.00	Transmission and Distribution	1,740,596	(7,710)				
35	344.00	Fire Mains	-	-				
36	345.00	Services	291,721	-				
37	346.00	Meters	148,596	-				
38	348.00	Hydrants	241,703	-				
39	349.00	Other Transmission & Distribution	-					
40		**Subtotal Transmission and Distributio**	$ 2,443,302	$ (42,124)	$ -	$ -	$ -	$ -
41								
42		**General**						
43	389.00	Land and Land Rights	$ -					
44	390.00	Structures and Improvements	44,422					
45	391.00	Office Furniture and Equipment	52,075					
46	391.10	Computer Equipment	(59,456)					
47	392.00	Transportation Equipment	181,157					
48	393.00	Stores Equipment	1,087					
49	394.00	Tools, Shop and Garage	2,621					
50	395.00	Laboratory Equipment	3,205					
51	396.00	Power Operated Equipment	5,979					
52	397.00	Communication Equipment	46,642					
53	398.00	Miscellaneous Equipment	19,382					
54		**Subtotal General**	$ 297,114	$ -	$ -	$ -	$ -	$ -
55								
56		Double Booked Advance						
57			-					
58		ADFUC adjustment 8/98	(52,460)					
59		TOTAL WATER PLANT	$ 5,190,896	$ (71,884)	$ -	$ -	$ -	$ -
60								
61								
62								
63								
64								
65								
66								
67								
68								

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal Schedule B-2, Page 8
2	Unidentified Plant	ACC Staff
3	Mis-posted Plant	ACC Staff
4	Plant Removed by Prev. Decision	ACC Staff
5	Post Test Year Plant	ACC Staff

Arizona American
Agua Fria/Anthem Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	Blank AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization						$ -	$ -
3	302.00	Franchises						-	-
4	303.00	Miscellaneous Intangibles						-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights						$ -	$ -
9	311.00	Structures and Improvements						-	-
10	312.00	Preliminary Treatment						-	657
11	313.00	Primary Treatment Equipment						-	-
12	314.00	Secondary Treatment Equipment						-	49,790
13	315,00	Tertiary Equipment						-	427,454
14	316.00	Disinfection Equipment						-	5,739
15	317.00	Effluent Lift Station E						-	1,778
16	318.00	Outfall Line						-	-
17	319.00	Sludge, Treatment & Distribution						-	19,349
18	321.00	Influent Lift Station						-	-
19	322.00	General Treatment Equipment						-	6,855
20		**Subtotal Treatment & Dis.**	$ -	$ -	$ -	$ -	$ -	$ -	$ 511,621
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights							$ -
24	341.00	Structures and Improvements						-	-
25	342.00	Collection System Lift						-	19,590
26	343.00	Collection Mains						-	138,243
27	344.00	Force Mains						-	-
28	345.00	Discharge Services						-	29,438
29	348.00	Manholes						-	40,395
30		**Subtotal Collection and Infl.**	$ -	$ -	$ -	$ -	$ -	$ -	$ 227,666
31									
32		**General**							
33	389.00	Land and Land Rights			$ -			$ -	$ -
34	390.00	Structures and Improvements			-			-	8,495
35	391.00	Office Funiture and Equipment			-			-	9,849
36	391.10	Computer Equipment			(1,006)			(1,006)	(12,882)
37	392.00	Transportation Equipment			-			-	28,362
38	393.00	Stores Equipment			-			-	213
39	394.00	Tools, Shop and Garage			-			-	498
40	395.00	Laboratory Equipment			-			-	627
41	396.00	Power Operated Equipment			(10)			(10)	1,160
42	397.00	Communication Equipment			-			-	9,086
43	398.00	Miscellaneous Equipment			(414)			(414)	3,096
44		**Subtotal General**	$ -	$ -	$ (1,430)	$ -	$ -	$ (1,430)	$ 48,504
45									
46									-
47								-	-
48		TOTAL WASTEWATER PLANT	$ -	$ -	$ (1,430)	$ -	$ -	$ (1,430)	$ 787,791
49									

ADJ #		Reference
6	Remove AFUDC Adjustment	ACC Staff
7	Acquisition Adjustment	
8	Common Plant Adjustments	Rebuttal B-2, Page 4
9		
10		

Arizona American - Anthem\Agua Fria Wastewater
Plant Summary with Common Plant Adjustments
at December 31, 2002

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Original Cost	Rebuttal Allocated Original Cost	Rebuttal Allocated Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.02732	$ 133	$ 133	$ -	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.02732	91,498	91,498	-	8,495	8,495	-
5	391.00	Office Funiture and Equipment	0.02732	27,255	27,255	-	9,849	9,849	-
6	391.10	Computer Equipment	0.02732	39,022	22,413	(16,608)	(11,876)	(12,882)	(1,006)
7	392.00	Transportation Equipment	0.02732	49,104	49,104	-	28,362	28,362	-
8	393.00	Stores Equipment	0.02732	785	785	-	213	213	-
9	394.00	Tools, Shop and Garage	0.02732	11,230	11,230	-	498	498	-
10	395.00	Laboratory Equipment	0.02732	3,557	3,557	-	627	627	-
11	396.00	Power Operated Equipment	0.02732	3,287	3,269	(18)	1,170	1,160	(10)
12	397.00	Communication Equipment	0.02732	15,777	15,777	-	9,086	9,086	-
13	398.00	Miscellaneous Equipment	0.02732	7,570	7,157	(414)	3,509	3,096	(414)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 249,219	$ 232,179	$ (17,040)	$ 49,934	$ 48,504	$ (1,430)
20									
21									
22	SUPPORTING SCHEDULES								
23	Rebuttal B-2, Page 5								
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Line No.	Account No.	Description		Direct Original Cost	Adjustment	Rebuttal Original Cost	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1									
2	389.00		0	$ 4,880	$ -	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements		3,349,189	-	3,349,189	310,963	-	310,963
4	391.00	Office Funiture and Equipment		997,650	-	997,650	360,503	-	360,503
5	391.10	Computer Equipment		1,428,345	(607,932)	820,413	(434,702)	(36,834)	(471,536)
6	392.00	Transportation Equipment		1,797,409	-	1,797,409	1,038,162	-	1,038,162
7	393.00	Stores Equipment		28,727	-	28,727	7,782	-	7,782
8	394.00	Tools, Shop and Garage		411,051	-	411,051	18,237	-	18,237
9	395.00	Laboratory Equipment		130,207	-	130,207	22,954	-	22,954
10	396.00	Power Operated Equipment		120,325	(669)	119,656	42,813	(368)	42,444
11	397.00	Communication Equipment		577,488	-	577,488	332,600	-	332,600
12	398.00	Miscellaneous Equipment		277,101	(15,137)	261,964	128,455	(15,137)	113,318
13									
14									
15		TOTALCOMMON PLANT		$ 9,122,373	$ (623,738)	$ 8,498,635	$ 1,827,766	$ (52,339)	$ 1,775,427
16									
17				SUPPORTING SCHEDULES					
18				Rebuttal Schedule B-2, Page 6a, 6b, 7a, 7b					
19									
20									

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6a
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880						
3	390.00	Structures and Improvements	3,349,189						
4	391.00	Office Funiture and Equipment	997,650						
5	391.10	Computer Equipment	1,428,345		(607,932)				
6	392.00	Transportation Equipment	1,797,409						
7	393.00	Stores Equipment	28,727						
8	394.00	Tools, Shop and Garage	411,051						
9	395.00	Laboratory Equipment	130,207						
10	396.00	Power Operated Equipment	120,325		(669)				
11	397.00	Communication Equipment	577,488						
12	398.00	Miscellaneous Equipment	277,101	(458)		(14,679)			
13		**Subtotal General**	$ 9,122,373	$ (458)	$ (608,601)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
2	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
3	Plant Not Used and Useful	ACC Staff, Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights							$ -	$ 4,880
3	390.00	Structures and Improvements							-	3,349,189
4	391.00	Office Funiture and Equipment							-	997,650
5	391.10	Computer Equipment							(607,932)	820,413
6	392.00	Transportation Equipment							-	1,797,409
7	393.00	Stores Equipment							-	28,727
8	394.00	Tools, Shop and Garage							-	411,051
9	395.00	Laboratory Equipment							-	130,207
10	396.00	Power Operated Equipment							(669)	119,656
11	397.00	Communication Equipment							-	577,488
12	398.00	Miscellaneous Equipment							(15,137)	261,964
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (623,738)	$ 8,498,635
14										
15			ADJ #		Reference					
16			6							
17			7							
18			8							
19			9							
20			10							
21										
22										
23										

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7a
Witness: Bour

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Adjustment 4	Adjustment 5	Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -						
3	390.00	Structures and Improvements	310,963						
4	391.00	Office Funiture and Equipment	360,503						
5	391.10	Computer Equipment	(434,702)		(36,834)				
6	392.00	Transportation Equipment	1,038,162						
7	393.00	Stores Equipment	7,782						
8	394.00	Tools, Shop and Garage	18,237						
9	395.00	Laboratory Equipment	22,954						
10	396.00	Power Operated Equipment	42,813		(368)				
11	397.00	Communication Equipment	332,600						
12	398.00	Miscellaneous Equipment	128,455	(458)		(14,679)			
13		**Subtotal General**	$ 1,827,766	$ (458)	$ (37,202)	$ (14,679)	$ -	$ -	$ -
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4		
5		

Arizona American - Maricopa Common
Original Cost Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-2
Page 7b
Witness: Bourassa

Line No.	Account No.	Description	Adjustment 7	Adjustment 8	Adjustment 9	Adjustment 10	Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights							$ -	$ -
3	390.00	Structures and Improvements							-	310,963
4	391.00	Office Funiture and Equipment							-	360,503
5	391.10	Computer Equipment							(36,834)	(471,536)
6	392.00	Transportation Equipment							-	1,038,162
7	393.00	Stores Equipment							-	7,782
8	394.00	Tools, Shop and Garage							-	18,237
9	395.00	Laboratory Equipment							-	22,954
10	396.00	Power Operated Equipment							(368)	42,444
11	397.00	Communication Equipment							-	332,600
12	398.00	Miscellaneous Equipment							(15,137)	113,318
13		**Subtotal General**			$ -	$ -	$ -	$ -	$ (52,339)	$ 1,775,427
14										
15			ADJ #			Reference				
16			6							
17			7							
18			8							
19			9							
20			10							
21										
22										
23										

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
RCND Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-3
Page 1
Witness: Bourassa

Line No.		Direct Adjusted at end of Test Year	Proforma Label	Adjustment Amount	Rebuttal Adjusted at end of Test Year
1	Gross Utility				
2	Plant in Service	$ 24,106,918	(1)	(435,555)	$ 23,671,364
3					
4	**Less:**				
5					
6	Accumulated				
7	Depreciation	843,970	(2)	(17,525)	826,446
8					
9	Net Utility Plant				
10	in Service	$ 23,262,948			$ 22,844,918
11					
12	**Less:**				
13	Advances in Aid of				
14	Construction (Ratemaking Purposes Only)	19,937,010	(3)	(366,965)	19,570,045
15					
16	Contributions in Aid of				
17	Construction - Net (Ratemaking	472,196	(4)	13,015	485,212
18	Purposes Only)				
19	Customer Meter Deposits	-			-
20	Deferred Income Taxes	-			-
21	Investment Tax Credits	-			-
22	**Plus:**				
23	Deferred Finance				
24	Charges	-			-
25	Deferred Tax Assets	-			-
26	Working capital	-			-
27	Citizens Acquisition Adjustment	-			-
28					
29	Total	$ 2,853,742			$ 2,789,661
30					
31					
32	(1) See B-3, Page 2				
33	(2) See B-3, Page 3				
34	(3) Adjust AIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
35	(4) Adjust CIAC to trended amounts based on ratio of rebuttal RCN plant to rebuttal O.C. plant				
36					
37					
38					
39					
40					
41					
42					

Arizona American
Anthem/Agua Fria Wastewater
RCND Plant Summary
December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Direct Accumulated Depreciation	Adjustment	Rebuttal Accumulated Depreciation
1		**Intangible**						
2	301.00	Organization	$ -	$ -	$ -	$ -	$ -	$ -
3	302.00	Franchises	275,341	(25,813)	249,528	-	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	$ 275,341	$ (25,813)	$ 249,528	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 336,560	$ -	$ 336,560	$ -	$ -	$ -
9	311.00	Structures and Improvements	2,400	1,379	3,779	-	-	-
10	312.00	Preliminary Treatment	828,719	1,208	829,927	657	-	657
11	313.00	Primary Treatment Equipment	-	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	2,106,352	(17,149)	2,089,203	50,861	(418)	50,443
13	315.00	Tertiary Equipment	9,095,977	(142,025)	8,953,952	450,009	(8,796)	441,213
14	316.00	Disinfection Equipment	895,260	(1,359)	893,900	5,762	(9)	5,753
15	317.00	Effluent Lift Station E	813,270	-	813,270	1,778	-	1,778
16	318.00	Outfall Line	-	-	-	-	-	-
17	319.00	Sludge, Treatment & Distribution	17,377	(6,780)	10,597	19,534	(73)	19,462
18	321.00	Influent Lift Station	5,000	2,463	7,463	-	-	-
19	322.00	General Treatment Equipment	91,735	(3,366)	88,369	7,567	(278)	7,289
20		**Subtotal Treatment & Dis.**	$ 14,192,649	$ (165,629)	$ 14,027,020	$ 536,167	$ (9,573)	$ 526,594
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -
24	341.00	Structures and Improvements	-	-	-	-	-	-
25	342.00	Collection System Lift	154,585	(732)	153,853	21,623	(793)	20,830
26	343.00	Collection Mains	7,875,353	(149,704)	7,725,649	146,914	(3,593)	143,321
27	344.00	Force Mains	1,918	-	1,918	-	-	-
28	345.00	Discharge Services	1,234,533	(24,612)	1,209,920	31,037	(619)	30,418
29	348.00	Manholes	(0)	(18,267)	(18,268)	42,638	(515)	42,123
30		**Subtotal Collection and Infl.**	$ 9,266,388	$ (193,316)	$ 9,073,073	$ 242,212	$ (5,520)	$ 236,692
31								
32		**General**						
33	389.00	Land and Land Rights	$ 345	$ (212)	$ 133	$ -	$ -	$ -
34	390.00	Structures and Improvements	124,183	(18,148)	106,035	13,825	(453)	13,372
35	391.00	Office Funiture and Equipment	54,659	(3,756)	50,903	13,718	259	13,977
36	391.10	Computer Equipment	74,356	(18,754)	55,602	(13,211)	(970)	(14,180)
37	392.00	Transportation Equipment	54,333	(762)	53,571	31,570	(458)	31,113
38	393.00	Stores Equipment	1,023	11	1,034	299	10	309
39	394.00	Tools, Shop and Garage	19,537	(5,251)	14,286	385	11	397
40	395.00	Laboratory Equipment	5,845	(2,785)	3,060	747	(3)	744
41	396.00	Power Operated Equipment	4,217	45	4,262	1,532	12	1,543
42	397.00	Communication Equipment	19,065	3,749	22,814	11,352	(80)	11,272
43	398.00	Miscellaneous Equipment	14,977	(4,934)	10,043	5,372	(759)	4,613
44		**Subtotal General**	$ 372,541	$ (50,798)	$ 321,743	$ 65,591	$ (2,431)	$ 63,160
45								
46				-	-	-	-	-
47				-	-	-	-	-
48		TOTAL WASTEWATER PLANT	$ 24,106,919	$ (435,555)	$ 23,671,364	$ 843,970	$ (17,525)	$ 826,446
49								
50		SUPPORTING SCHEDULES:						
51		Rebuttal B-2, page 2a, 2b, 3a, 3b						
52								

Arizona American
Agua Fria/Anthem Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2a
Witness: Bourassa

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Not Used Adjustment 1	Unidentifies Adjustment 2	Mispost Adjustment 3	Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					$ -
3	302.00	Franchises	275,341					-
4	303.00	Miscellaneous Intangibles	-					-
5		**Subtotal Intangible**	$ 275,341	$ -	$ -	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ 336,560					$ -
9	311.00	Structures and Improvements	2,400					1,379
10	312.00	Preliminary Treatment	828,719					1,208
11	313.00	Primary Treatment Equipment	-					-
12	314.00	Secondary Treatment Equipment	2,106,352					-
13	315.00	Tertiary Equipment	9,095,977					-
14	316.00	Disinfection Equipment	895,260					-
15	317.00	Effluent Lift Station E	813,270					-
16	318.00	Outfall Line	-					-
17	319.00	Sludge, Treatment & Distribution	17,377					-
18	321.00	Influent Lift Station	5,000					2,463
19	322.00	General Treatment Equipment	91,735					-
20		**Subtotal Treatment & Dis.**	$ 14,192,649	$ -	$ -	$ -	$ -	$ 5,050
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -					$ -
24	341.00	Structures and Improvements	-					-
25	342.00	Collection System Lift	154,585					4,940
26	343.00	Collection Mains	7,875,353					-
27	344.00	Force Mains	1,918					-
28	345.00	Discharge Services	1,234,533					-
29	348.00	Manholes	(0)					-
30		**Subtotal Collection and Infl.**	$ 9,266,388	$ -	$ -	$ -	$ -	$ 4,940
31								
32		**General**						
33	389.00	Land and Land Rights	$ 345					$ -
34	390.00	Structures and Improvements	124,183					-
35	391.00	Office Furniture and Equipment	54,659					(2,842)
36	391.10	Computer Equipment	74,356					-
37	392.00	Transportation Equipment	54,333					-
38	393.00	Stores Equipment	1,023					-
39	394.00	Tools, Shop and Garage	19,537					(5,227)
40	395.00	Laboratory Equipment	5,845					(1,727)
41	396.00	Power Operated Equipment	4,217					-
42	397.00	Communication Equipment	19,065					4,038
43	398.00	Miscellaneous Equipment	14,977					(4,200)
44		**Subtotal General**	$ 372,541	$ -	$ -	$ -	$ -	$ (9,958)
45								
46			-					
47			-					
48		TOTAL WASTEWATER PLANT	$ 24,106,919	$ -	$ -	$ -	$ -	$ 32
49								

ADJ #		Reference
1	Plant Not Used and Useful	Blank
2	Unidentified Plant	Blank
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decision	Blank
5	Post Test Year Plant	ACC Staff

Arizona American
Agua Fria/Anthem Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 2b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Trended Reproduction Cost New
1		**Intangible**							
2	301.00	Organization				$ -		$ -	$ -
3	302.00	Franchises				(25,813)		(25,813)	249,528
4	303.00	Miscellaneous Intangibles				-		-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ (25,813)	$ -	$ (25,813)	$ 249,528
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights				$ -		$ -	$ 336,560
9	311.00	Structures and Improvements				-		1,379	3,779
10	312.00	Preliminary Treatment				-		1,208	829,927
11	313.00	Primary Treatment Equipment				-		-	-
12	314.00	Secondary Treatment Equipment				(17,149)		(17,149)	2,089,203
13	315.00	Tertiary Equipment				(142,025)		(142,025)	8,953,952
14	316.00	Disinfection Equipment				(1,359)		(1,359)	893,900
15	317.00	Effluent Lift Station E				-		-	813,270
16	318.00	Outfall Line				-		-	-
17	319.00	Sludge, Treatment & Distribution				(6,780)		(6,780)	10,597
18	321.00	Influent Lift Station				-		2,463	7,463
19	322.00	General Treatment Equipment				(3,366)		(3,366)	88,369
20		**Subtotal Treatment & Dis.**	$ -	$ -	$ -	$ (170,679)	$ -	$ (165,629)	$ 14,027,020
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights				$ -			$ -
24	341.00	Structures and Improvements				-		-	-
25	342.00	Collection System Lift				(5,672)		(732)	153,853
26	343.00	Collection Mains				(149,704)		(149,704)	7,725,649
27	344.00	Force Mains				-		-	1,918
28	345.00	Discharge Services				(24,612)		(24,612)	1,209,920
29	348.00	Manholes				(18,267)		(18,267)	(18,268)
30		**Subtotal Collection and Infl.**	$ -	$ -	$ -	$ (198,256)	$ -	$ (193,316)	$ 9,073,073
31									
32		**General**							
33	389.00	Land and Land Rights			$ (212)	$ -		$ (212)	$ 133
34	390.00	Structures and Improvements			(3,243)	(14,906)		(18,148)	106,035
35	391.00	Office Funiture and Equipment			33	(947)		(3,756)	50,903
36	391.10	Computer Equipment			(18,754)	-		(18,754)	55,602
37	392.00	Transportation Equipment			(762)	-		(762)	53,571
38	393.00	Stores Equipment			11	-		11	1,034
39	394.00	Tools, Shop and Garage			(24)	-		(5,251)	14,286
40	395.00	Laboratory Equipment			(42)	(1,015)		(2,785)	3,060
41	396.00	Power Operated Equipment			45	-		45	4,262
42	397.00	Communication Equipment			(289)	-		3,749	22,814
43	398.00	Miscellaneous Equipment			(734)	-		(4,934)	10,043
44		**Subtotal General**	$ -	$ -	$ (23,971)	$ (16,868)	$ -	$ (50,798)	$ 321,743
45									
46									-
47								-	-
48		TOTAL WASTEWATER PLANT	$ -	$ -	$ (23,971)	$ (411,616)	$ -	$ (435,555)	$ 23,671,364
49									

ADJ #		Reference
6	Remove Trended AFUDC Adjustme	Blank
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American
Agua Fria/Anthem Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3a
Witness: Bourassa

Line No.	Account No.	Description	Direct Accumulated Depreciation	Not Used Adjustment 1	Unidentifies Adjustment 2	Mispost Adjustment 3	Prev. Decision Adjustment 4	Post T.Y Adjustment 5
1		**Intangible**						
2	301.00	Organization	$ -					
3	302.00	Franchises	-					
4	303.00	Miscellaneous Intangibles	-					
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	$ -					
9	311.00	Structures and Improvements	-					
10	312.00	Preliminary Treatment	657					
11	313.00	Primary Treatment Equipment	-					
12	314.00	Secondary Treatment Equipment	50,861					
13	315,00	Tertiary Equipment	450,009					
14	316.00	Disinfection Equipment	5,762					
15	317.00	Effluent Lift Station E	1,778					
16	318.00	Outfall Line	-					
17	319.00	Sludge, Treatment & Distribution	19,534					
18	321.00	Influent Lift Station	-					
19	322.00	General Treatment Equipment	7,567					
20		**Subtotal Treatment & Dis.**	$ 536,167	$ -	$ -	$ -	$ -	$ -
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	$ -					
24	341.00	Structures and Improvements	-					
25	342.00	Collection System Lift	21,623					
26	343.00	Collection Mains	146,914					
27	344.00	Force Mains	-					
28	345.00	Discharge Services	31,037					
29	348.00	Manholes	42,638					
30		**Subtotal Collection and Infl.**	$ 242,212	$ -	$ -	$ -	$ -	$ -
31								
32		**General**						
33	389.00	Land and Land Rights	$ -					
34	390.00	Structures and Improvements	13,825					
35	391.00	Office Funiture and Equipment	13,718					
36	391.10	Computer Equipment	(13,211)					
37	392.00	Transportation Equipment	31,570					
38	393.00	Stores Equipment	299					
39	394.00	Tools, Shop and Garage	385					
40	395.00	Laboratory Equipment	747					
41	396.00	Power Operated Equipment	1,532					
42	397.00	Communication Equipment	11,352					
43	398.00	Miscellaneous Equipment	5,372					
44		**Subtotal General**	$ 65,591	$ -	$ -	$ -	$ -	$ -
45								
46			-					
47			-					
48		TOTAL WASTEWATER PLANT	$ 843,970	$ -	$ -	$ -	$ -	$ -
49								

ADJ #		Reference
1	Plant Not Used and Useful	Blank
2	Unidentified Plant	Blank
3	Mis-posted Plant	Blank
4	Plant Removed by Prev. Decision	Blank
5	Post Test Year Plant	ACC Staff

Arizona American
Agua Fria/Anthem Wastewater
Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 3b
Witness: Bourassa

Line No.	Account No.	Description	AFUDC Adjustment 6	Acquisition Adj Adjustment 7	Common Plant Adjustment Adjustment 8	RCN Study Adjustment 9	Adjustment 10	Total Adjustments	Rebuttal Accumulated Depreciation
1		**Intangible**							
2	301.00	Organization				$ -		$ -	$ -
3	302.00	Franchises				-		-	-
4	303.00	Miscellaneous Intangibles				-		-	-
5		**Subtotal Intangible**	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6									
7		**Treatment & Discharge**							
8	310.00	Land and Land Rights				$ -		$ -	$ -
9	311.00	Structures and Improvements				-		-	-
10	312.00	Preliminary Treatment				-		-	657
11	313.00	Primary Treatment Equipment				-		-	-
12	314.00	Secondary Treatment Equipment				(418)		(418)	50,443
13	315,00	Tertiary Equipment				(8,796)		(8,796)	441,213
14	316.00	Disinfection Equipment				(9)		(9)	5,753
15	317.00	Effluent Lift Station E				-		-	1,778
16	318.00	Outfall Line				-		-	-
17	319.00	Sludge, Treatment & Distribution				(73)		(73)	19,462
18	321.00	Influent Lift Station				-		-	-
19	322.00	General Treatment Equipment				(278)		(278)	7,289
20		**Subtotal Treatment & Dis.**	$ -	$ -	$ -	$ (9,573)	$ -	$ (9,573)	$ 526,594
21									
22		**Collection and Influent**							
23	340.00	Land and Land Rights				$ -			$ -
24	341.00	Structures and Improvements				-		-	-
25	342.00	Collection System Lift				(793)		(793)	20,830
26	343.00	Collection Mains				(3,593)		(3,593)	143,321
27	344.00	Force Mains				-		-	-
28	345.00	Discharge Services				(619)		(619)	30,418
29	348.00	Manholes				(515)		(515)	42,123
30		**Subtotal Collection and Infl.**	$ -	$ -	$ -	$ (5,520)	$ -	$ (5,520)	$ 236,692
31									
32		**General**							
33	389.00	Land and Land Rights			$ -			$ -	$ -
34	390.00	Structures and Improvements			(453)			(453)	13,372
35	391.00	Office Funiture and Equipment			259			259	13,977
36	391.10	Computer Equipment			(970)			(970)	(14,180)
37	392.00	Transportation Equipment			(458)			(458)	31,113
38	393.00	Stores Equipment			10			10	309
39	394.00	Tools, Shop and Garage			11			11	397
40	395.00	Laboratory Equipment			(3)			(3)	744
41	396.00	Power Operated Equipment			12			12	1,543
42	397.00	Communication Equipment			(80)			(80)	11,272
43	398.00	Miscellaneous Equipment			(759)			(759)	4,613
44		**Subtotal General**	$ -	$ -	$ (2,431)	$ -	$ -	$ (2,431)	$ 63,160
45									
46									-
47								-	-
48		TOTAL WASTEWATER PLANT	$ -	$ -	$ (2,431)	$ (15,093)	$ -	$ (17,525)	$ 826,446
49									

ADJ #		Reference
6	Remove Trended AFUDC Adjustme	Blank
7	Acquisition Adjustment	Blank
8	Common Plant Adjustments	Rebuttal B-3, Page 4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10		

Arizona American
Anthem\Agua Fria Wastewater
RCND Plant Summary with Common Plant Adjustments
at December 31, 2002

Exhibit
Rebuttal Schedule B-3
Page 4

Line No.	Account No.	Description	Allocation Factor	Direct Allocated Trended Amount	Rebuttal Allocated Trended Amount	Rebuttal Allocated Trended Adjustment	Direct Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Depreciation	Rebuttal Allocated Accumulated Adjustment
1									
2		**Maricopa Common Plant**							
3	389.00	Land and Land Rights	0.02732	$ 345	$ 133	$ (212)	$ -	$ -	$ -
4	390.00	Structures and Improvements	0.02732	124,183	120,941	(3,243)	13,825	13,372	(453)
5	391.00	Office Funiture and Equipment	0.02732	35,159	35,192	33	13,718	13,977	259
6	391.10	Computer Equipment	0.02732	43,404	24,650	(18,754)	(13,211)	(14,180)	(970)
7	392.00	Transportation Equipment	0.02732	54,333	53,571	(762)	31,570	31,113	(458)
8	393.00	Stores Equipment	0.02732	1,023	1,034	11	299	309	10
9	394.00	Tools, Shop and Garage	0.02732	14,310	14,286	(24)	385	397	11
10	395.00	Laboratory Equipment	0.02732	4,118	4,075	(42)	747	744	(3)
11	396.00	Power Operated Equipment	0.02732	4,217	4,262	45	1,532	1,543	12
12	397.00	Communication Equipment	0.02732	19,065	18,777	(289)	11,352	11,272	(80)
13	398.00	Miscellaneous Equipment	0.02732	10,777	10,043	(734)	5,372	4,613	(759)
14									
15									
16									
17									
18									
19		TOTALCOMMON PLANT		$ 310,934	$ 286,963	$ (23,971)	$ 65,591	$ 63,160	$ (2,431)
20									
21									
22		SUPPORTING SCHEDULES							
23		Rebuttal B-3, Page 5							
24									
25									
26									
27									

Arizona American - Maricopa
Original Cost and RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 5
Witness: Bourassa

Line No.	Account No.	Description		Trended Reproduction Cost New	Adjustment	Rebuttal Trended Reproduction Cost New	Trended Direct Accumulated Depreciation	Adjustment	Rebuttal Trended Accumulated Depreciation
1									
2	389.00		0	$ 12,628	$ (7,748)	$ 4,880	$ -	$ -	$ -
3	390.00	Structures and Improvements		4,545,571	(118,688)	4,426,882	506,059	(16,579)	489,480
4	391.00	Office Funiture and Equipment		1,286,955	1,191	1,288,146	502,142	9,471	511,613
5	391.10	Computer Equipment		1,588,744	(686,472)	902,272	(483,558)	(35,499)	(519,057)
6	392.00	Transportation Equipment		1,988,785	(27,882)	1,960,903	1,155,595	(16,750)	1,138,845
7	393.00	Stores Equipment		37,463	387	37,850	10,952	359	11,312
8	394.00	Tools, Shop and Garage		523,808	(874)	522,934	14,105	411	14,516
9	395.00	Laboratory Equipment		150,719	(1,554)	149,166	27,352	(109)	27,243
10	396.00	Power Operated Equipment		154,364	1,634	155,998	56,063	425	56,488
11	397.00	Communication Equipment		697,864	(10,566)	687,298	415,524	(2,934)	412,590
12	398.00	Miscellaneous Equipment		394,470	(26,855)	367,615	196,632	(27,786)	168,847
13									
14									
15		TOTALCOMMON PLANT		$ 11,381,370	$ (877,427)	$ 10,503,943	$ 2,400,866	$ (88,989)	$ 2,311,877
16									
17				SUPPORTING SCHEDULES					
18				Rebuttal Schedule B-3, Page 6a, 6b, 7a, 7b					
19									
20									

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6a

Line No.	Account No.	Description	Direct Trended Reproduction Cost New	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ 4,880				(6,755)	-	-
3	390.00	Structures and Improvements	3,349,189				(78,054)	-	(2,575)
4	391.00	Office Funiture and Equipment	997,650				5,995	(2,202)	6,085
5	391.10	Computer Equipment	1,428,345		(670,782)		(12,717)	-	(2,402)
6	392.00	Transportation Equipment	1,797,409				(14,376)	(109)	(3,537)
7	393.00	Stores Equipment	28,727				732	-	59
8	394.00	Tools, Shop and Garage	411,051				1,875	(1,135)	(212)
9	395.00	Laboratory Equipment	130,207				(52)	-	116
10	396.00	Power Operated Equipment	120,325		(799)		3,730	-	(1,226)
11	397.00	Communication Equipment	577,488				(1,313)	-	1,715
12	398.00	Miscellaneous Equipment	277,101	(670)		(39,030)	12,635	(43)	454
13		**Subtotal General**	$ 9,122,373	$ (670)	$ (671,581)	$ (39,030)	$ (88,300)	$ (3,489)	$ (1,523)
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
Page 6b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Original Cost
1		**General**								
2	389.00	Land and Land Rights	-	(993)	-	-	-		$ (7,748)	$ (2,868)
3	390.00	Structures and Improvements	(17,341)	(10)	(3,192)	(2,612)	(14,906)		(118,688)	3,230,501
4	391.00	Office Funiture and Equipment	(4,567)	(247)	(2,019)	(906)	(947)		1,191	998,841
5	391.10	Computer Equipment	241	(255)	(556)	-	-		(686,472)	741,874
6	392.00	Transportation Equipment	(5,231)	(404)	(4,372)	148	-		(27,882)	1,769,527
7	393.00	Stores Equipment	(246)	(158)	-	-	-		387	29,114
8	394.00	Tools, Shop and Garage	(1,038)	(270)	(94)	-	-		(874)	410,177
9	395.00	Laboratory Equipment	124	-	-	(727)	(1,015)		(1,554)	128,654
10	396.00	Power Operated Equipment	11	-	-	(82)	-		1,634	121,959
11	397.00	Communication Equipment	(10,889)	(83)	3	-	-		(10,566)	566,923
12	398.00	Miscellaneous Equipment	413	(17)	(609)	11	-		(26,855)	250,246
13		**Subtotal General**	$ (38,523)	$ (2,436)	$ (10,839)	$ (4,168)	$ (16,868)	$ -	$ (877,427)	$ 8,244,946
14										
15										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

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Exhibit
Rebuttal Schedule B-3
Page 7a

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Line No.	Account No.	Description	Direct Accumulated Depreciation	Sun City West Water Unidentified Adjustment 1	Sun City Water Not Used Adjustment 2	Sun City Wastewater Unidentified Adjustment 3	Sun City Water RCN Study Adjustment 4	Sun City Wastewater RCN Study Adjustment 5	Sun City West Water RCN Study Adjustment 6
1		**General**							
2	389.00	Land and Land Rights	$ -				-	-	-
3	390.00	Structures and Improvements	310,963				(14,303)	-	(901)
4	391.00	Office Funiture and Equipment	360,503				3,247	526	6,108
5	391.10	Computer Equipment	(434,702)		(40,657)		5,273	-	118
6	392.00	Transportation Equipment	1,038,162				(9,526)	(109)	(2,171)
7	393.00	Stores Equipment	7,782				357	-	46
8	394.00	Tools, Shop and Garage	18,237				175	442	(60)
9	395.00	Laboratory Equipment	22,954				(18)	-	43
10	396.00	Power Operated Equipment	42,813		(440)		1,414	-	(546)
11	397.00	Communication Equipment	332,600				(1,154)	-	1,730
12	398.00	Miscellaneous Equipment	128,455	(670)		(39,030)	8,302	3,466	213
13		**Subtotal General**	$ 1,827,766	$ (670)	$ (41,096)	$ (39,030)	$ (6,233)	$ 4,325	$ 4,581
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

ADJ #		Reference
1	Plant Not Used and Useful	Rebuttal B-2, Page 8
2	Plant Not Used and Useful	Rebuttal B-2, Page 8
3	Plant Not Used and Useful	Rebuttal B-2, Page 8
4	Adjust to Rebuttal RCN Study	Rebuttal B-4
5	Adjust to Rebuttal RCN Study	Rebuttal B-4
6	Adjust to Rebuttal RCN Study	Rebuttal B-4

Arizona American - Maricopa Common
RCND Common Plant Summary
at December 31, 2001

Exhibit
Rebuttal Schedule B-3
7b
Witness: Bourassa

Line No.	Account No.	Description	Sun City West Wastewater RCN Study Adjustment 7	Tubac Water RCN Study Adjustment 8	Agua Fria Water RCN Study Adjustment 9	Anthem Water RCN Study Adjustment 10	Anthem Wastewater RCN Study Adjustment 11	Adjustment 12	Total Adjustments	Rebuttal Accumulated Depreciation
1		**General**								
2	389.00	Land and Land Rights	-	-	-	-	-		$ -	$ -
3	390.00	Structures and Improvements	(492)	(2)	(259)	(93)	(529)		(16,579)	294,384
4	391.00	Office Funiture and Equipment	82	(44)	(274)	(80)	(94)		9,471	369,974
5	391.10	Computer Equipment	(9)	(178)	(48)	-	-		(35,499)	(470,201)
6	392.00	Transportation Equipment	(1,564)	(313)	(3,018)	(49)	-		(16,750)	1,021,413
7	393.00	Stores Equipment	5	(48)	-	-	-		359	8,141
8	394.00	Tools, Shop and Garage	(89)	(38)	(19)	-	-		411	18,648
9	395.00	Laboratory Equipment	28	-	-	(58)	(104)		(109)	22,845
10	396.00	Power Operated Equipment	1	-	-	(4)	-		425	43,238
11	397.00	Communication Equipment	(3,485)	(28)	3	-	-		(2,934)	329,666
12	398.00	Miscellaneous Equipment	150	(3)	(213)	0	-		(27,786)	100,670
13		**Subtotal General**	$ (5,372)	$ (654)	$ (3,829)	$ (284)	$ (727)	$ -	$ (88,989)	$ 1,738,777
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

ADJ #		Reference
7	Adjust to Rebuttal RCN Study	Rebuttal B-4
8	Adjust to Rebuttal RCN Study	Rebuttal B-4
9	Adjust to Rebuttal RCN Study	Rebuttal B-4
10	Adjust to Rebuttal RCN Study	Rebuttal B-4
11	Adjust to Rebuttal RCN Study	Rebuttal B-4
12		

Arizona-American Agua Fria\Anthem Wastewater
B-3 Adjustments

Exhibit B-4
Page A1
Witness: Bourassa

Line No.	Account No.	Description	Direct Original Cost	B-2 Adjustments	Adjusted Original Cost	O.C. A/D	B-2 Adjustments	O.C. Adjusted A/D
1		**Intangible**						
2	301.00	Organization	-	-	-	-	-	-
3	302.00	Franchises	248,678	-	248,678	-	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	248,678	-	248,678	-	-	-
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	336,560	-	336,560	-	-	-
9	311.00	Structures and Improvements	-	-	-	-	-	-
10	312.00	Preliminary Treatment	800,483	-	800,483	657	-	657
11	313.00	Primary Treatment Equipment	-	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	2,043,907	-	2,043,907	49,790	-	49,790
13	315.00	Tertiary Equipment	6,901,702	-	6,901,702	427,454	-	427,454
14	316.00	Disinfection Equipment	872,216	-	872,216	5,739	-	5,739
15	317.00	Effluent Lift Station E	808,883	-	808,883	1,778	-	1,778
16	318.00	Outfall Line	-	-	-	-	-	-
17	319.00	Sludge, Treatment & Distribution	1,808,517	-	1,808,517	19,349	-	19,349
18	321.00	Influent Lift Station	-	-	-	-	-	-
19	322.00	General Treatment Equipment	83,108	-	83,108	6,855	-	6,855
20		**Subtotal Treat & Disc**	13,655,376	-	13,655,376	511,621	-	511,621
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	-	-	-	-	-	-
24	341.00	Structures and Improvements	-	-	-	-	-	-
25	342.00	Collection System Lift	140,048	-	140,048	19,590	-	19,590
26	343.00	Collection Mains	5,850,175	-	5,850,175	138,243	-	138,243
27	344.00	Force Mains	1,918	-	1,918	-	-	-
28	345.00	Discharge Services	1,170,937	-	1,170,937	29,438	-	29,438
29	348.00	Manholes	1,574,950	-	1,574,950	40,395	-	40,395
30		**Subtotal Coll.and Infl.**	8,738,028	-	8,738,028	227,666	-	227,666
31								
32		**General**						
33	389.00	Land and Land Rights	-	-	-	-	-	-
34	390.00	Structures and Improvements	637,475	-	637,475	22,642	-	22,642
35	391.00	Office Furniture and Equipment	31,682	-	31,682	3,136	-	3,136
36	391.10	Computer Equipment	-	-	-	-	-	-
37	392.00	Transportation Equipment	-	-	-	-	-	-
38	393.00	Stores Equipment	-	-	-	-	-	-
39	394.00	Tools, Shop and Garage	-	-	-	-	-	-
40	395.00	Laboratory Equipment	36,160	-	36,160	3,711	-	3,711
41	396.00	Power Operated Equipment	-	-	-	-	-	-
42	397.00	Communication Equipment	-	-	-	-	-	-
43	398.00	Miscellaneous Equipment	-	-	-	-	-	-
44		**Subtotal General**	705,317	-	705,317	29,488	-	29,488
45								
46			-	-	-	-	-	-
47			-	-	-	-	-	-
48		TOTAL WASTEWATER PLANT	23,347,400	-	23,347,400	768,775	-	768,775
49								
50								
51								

Arizona-American Agua Fria\Anthem Wastewater
B-3 Adjustments

Exhibit B-4
Page A2
Witness: Bourassa
(B-3, page 2b, Adj. #9)

Line No.	Account No.	Description	RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted RCN	Adjustment RCN Direct to RCN Rebuttal	Adjusted RCN Rebuttal
1		**Intangible**					
2	301.00	Organization	-	-	-	-	-
3	302.00	Franchises	274,491	-	274,491	(25,813)	248,678
4	303.00	Miscellaneous Intangibles	-	-	-	-	-
5		**Subtotal Intangible**	274,491	-	274,491	(25,813)	248,678
6							
7		**Treatment & Discharge**					
8	310.00	Land and Land Rights	336,560	-	336,560	-	336,560
9	311.00	Structures and Improvements	-	-	-	-	-
10	312.00	Preliminary Treatment	800,483	-	800,483	-	800,483
11	313.00	Primary Treatment Equipment	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	2,087,858	-	2,087,858	(17,149)	2,070,709
13	315.00	Tertiary Equipment	7,265,883	-	7,265,883	(142,025)	7,123,858
14	316.00	Disinfection Equipment	875,700	-	875,700	(1,359)	874,340
15	317.00	Effluent Lift Station E	808,883	-	808,883	-	808,883
16	318.00	Outfall Line	-	-	-	-	-
17	319.00	Sludge, Treatment & Distribution	1,825,894	-	1,825,894	(6,780)	1,819,114
18	321.00	Influent Lift Station	-	-	-	-	-
19	322.00	General Treatment Equipment	91,735	-	91,735	(3,366)	88,369
20		**Subtotal Treat & Disc**	14,092,996	-	14,092,996	(170,679)	13,922,317
21							
22		**Collection and Influent**					
23	340.00	Land and Land Rights	-	-	-	-	-
24	341.00	Structures and Improvements	-	-	-	-	-
25	342.00	Collection System Lift	154,585	-	154,585	(5,672)	148,913
26	343.00	Collection Mains	6,214,767	-	6,214,767	(149,704)	6,065,062
27	344.00	Force Mains	1,918	-	1,918	-	1,918
28	345.00	Discharge Services	1,234,533	-	1,234,533	(24,612)	1,209,920
29	348.00	Manholes	1,660,586	-	1,660,586	(18,267)	1,642,319
30		**Subtotal Coll.and Infl.**	9,266,388	-	9,266,388	(198,256)	9,068,132
31							
32		**General**				**(Common Plant, B-2, Page 6)**	
33	389.00	Land and Land Rights	-	-	-	-	-
34	390.00	Structures and Improvements	703,245	-	703,245	(14,906)	688,339
35	391.00	Office Furniture and Equipment	34,971	-	34,971	(947)	34,023
36	391.10	Computer Equipment	-	-	-	-	-
37	392.00	Transportation Equipment	-	-	-	-	-
38	393.00	Stores Equipment	-	-	-	-	-
39	394.00	Tools, Shop and Garage	-	-	-	-	-
40	395.00	Laboratory Equipment	39,685	-	39,685	(1,015)	38,669
41	396.00	Power Operated Equipment	-	-	-	-	-
42	397.00	Communication Equipment	-	-	-	-	-
43	398.00	Miscellaneous Equipment	-	-	-	-	-
44		**Subtotal General**	777,901	-	777,901	(16,868)	761,032
45							
46			-	-	-	-	-
47			-	-	-	-	-
48		TOTAL WASTEWATER PLANT	24,411,775	-	24,411,775	(411,616)	24,000,160
49							
50							
51							

Arizona-American Agua Fria\Anthem Wastewater
B-3 Adjustments

Exhibit B-4
Page A3
Witness: Bourassa

Line No.	Account No.	Description	A/D RCN Direct	B-3 (Excl PTY Plant) Adjustments	Adjusted A/D RCN Rebuttal	Ratio	A/D RCN Rebttual	(B-3, page 3b, Adj. #9) A/D Adjustment Adjusted RCN Direct to RCN Rebuttal
1		**Intangible**						
2	301.00	Organization	-	-	-	-	-	-
3	302.00	Franchises	-	-	-	1.0000	-	-
4	303.00	Miscellaneous Intangibles	-	-	-	-	-	-
5		**Subtotal Intangible**	-	-	-		-	-
6								
7		**Treatment & Discharge**						
8	310.00	Land and Land Rights	-	-	-	1.0000	-	-
9	311.00	Structures and Improvements	-	-	-	-	-	-
10	312.00	Preliminary Treatment	657	-	657	1.0000	657	-
11	313.00	Primary Treatment Equipment	-	-	-	-	-	-
12	314.00	Secondary Treatment Equipment	50,861	-	50,861	1.0131	50,443	(418)
13	315.00	Tertiary Equipment	450,009	-	450,009	1.0322	441,213	(8,796)
14	316.00	Disinfection Equipment	5,762	-	5,762	1.0024	5,753	(9)
15	317.00	Effluent Lift Station E	1,778	-	1,778	1.0000	1,778	-
16	318.00	Outfall Line	-	-	-	-	-	-
17	319.00	Sludge, Treatment & Distribution	19,534	-	19,534	1.0059	19,462	(73)
18	321.00	Influent Lift Station	-	-	-	-	-	-
19	322.00	General Treatment Equipment	7,567	-	7,567	1.0633	7,289	(278)
20		**Subtotal Treat & Disc**	536,167	-	536,167		526,594	(9,573)
21								
22		**Collection and Influent**						
23	340.00	Land and Land Rights	-	-	-	-	-	-
24	341.00	Structures and Improvements	-	-	-	-	-	-
25	342.00	Collection System Lift	21,623	-	21,623	1.0633	20,830	(793)
26	343.00	Collection Mains	146,914	-	146,914	1.0367	143,321	(3,593)
27	344.00	Force Mains	-	-	-	1.0000	-	-
28	345.00	Discharge Services	31,037	-	31,037	1.0333	30,418	(619)
29	348.00	Manholes	42,638	-	42,638	1.0428	42,123	(515)
30		**Subtotal Coll.and Infl.**	242,212	-	242,212		236,692	(5,520)
31								
32		**General**						**(Common Plant, B-2, Page 7)**
33	389.00	Land and Land Rights	-	-	-	-	-	-
34	390.00	Structures and Improvements	24,978	-	24,978	1.0798	24,448	(529)
35	391.00	Office Funiture and Equipment	3,461	-	3,461	1.0739	3,367	(94)
36	391.10	Computer Equipment	-	-	-	-	-	-
37	392.00	Transportation Equipment	-	-	-	-	-	-
38	393.00	Stores Equipment	-	-	-	-	-	-
39	394.00	Tools, Shop and Garage	-	-	-	-	-	-
40	395.00	Laboratory Equipment	4,073	-	4,073	1.0694	3,968	(104)
41	396.00	Power Operated Equipment	-	-	-	-	-	-
42	397.00	Communication Equipment	-	-	-	-	-	-
43	398.00	Miscellaneous Equipment	-	-	-	-	-	-
44		**Subtotal General**	32,512	-	32,512		31,784	(727)
45								
46			-	-	-	-	-	-
47			-	-	-	-	-	-
48		TOTAL WASTEWATER PLANT	810,891	-	810,891		795,071	(15,821)
49								
50								
51								

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Trended RCN
Handy-Whitman

Exhibit
Schedule B-4
Page 1
Witness: Bourassa

Company Code: 4023 Business Area: 4539 Anthem/Agua Fria Wastewater (Treatco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T30200	FRANCH/CONSENTS		1999	172,542	180.2	167.8	1.0739	185,293	172,542
		T30200	Class Totals	172,542				185,293	172,542
T31000	LAND/LAND RIGHTS		2001	336,560	180.2	180.2	1.0000	336,560	336,560
		T31000	Class Totals	336,560				336,560	336,560
T31200	PRE TREATMENT EQ		2001	800,483	403.0	403.0	1.0000	800,483	800,483
		T31200	Class Totals	800,483				800,483	800,483
T31400	SCND TREAMENT EQ		1999	423,421	403.0	379.0	1.0633	450,223	450,223
T31400	SCND TREAMENT EQ		2001	1,620,485	403.0	403.0	1.0000	1,620,485	1,620,485
		T31400	Class Totals	2,043,906				2,070,709	2,070,709
T31500	TERTIARY EQ		1999	3,506,483	403.0	379.0	1.0633	3,728,443	3,728,443
T31500	TERTIARY EQ		2000	5,878	403.0	390.0	1.0333	6,073	6,073
T31500	TERTIARY EQ		2001	3,389,340	403.0	403.0	1.0000	3,389,340	3,389,340
		T31500	Class Totals	6,901,701				7,123,858	7,123,858

Company Code: 4023 Business Area: 4539 Anthem/Agua Fria Wastewater (Treatco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T31600	DISINFECTION EQ		1999	33,565	403.0	379.0	1.0633	35,689	35,689
T31600	DISINFECTION EQ		2001	838,650	403.0	403.0	1.0000	838,650	838,650
	T31600	Class Totals		872,215				874,340	874,340
T31700	EFFLUENT STATION		2001	808,883	403.0	403.0	1.0000	808,883	808,883
	T31700	Class Totals		808,883				808,883	808,883
T31900	SLUDGE, TRMNT & DIS		1999	167,405	403.0	379.0	1.0633	178,002	178,002
T31900	SLUDGE, TRMNT & DIS		2001	1,641,111	403.0	403.0	1.0000	1,641,111	1,641,111
	T31900	Class Totals		1,808,517				1,819,113	1,819,113
T32200	GNL TRMNT EQ		1999	83,108	403.0	379.0	1.0633	88,369	88,369
	T32200	Class Totals		83,108				88,369	88,369
T34200	COLL. SYSTEM LIFT		1999	140,048	403.0	379.0	1.0633	148,913	148,913
	T34200	Class Totals		140,048				148,913	148,913
T34300	COLL. MAINS		1999	1,807,675	324.0	306.0	1.0588	1,913,966	1,913,966
T34300	COLL. MAINS		2000	139,128	324.0	316.0	1.0253	142,648	142,648

Company Code: 4023 Business Area: 4539 Anthem/Agua Fria Wastewater (Treatco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T34300	COLL. MAINS		2001	10,050	324.0	320.0	1.0125	10,175	10,175
T34300	COLL. MAINS		2001	560,387	324.0	324.0	1.0000	560,387	560,387
		T34300	Class Totals	2,517,240				2,627,177	2,627,177
T34400	FORCE MAINS		2001	1,917	324.0	324.0	1.0000	1,917	1,917
		T34400	Class Totals	1,917				1,917	1,917
T34800	MANHOLES		1999	353,651	350.0	324.0	1.0802	382,013	382,013
T34800	MANHOLES		2000	26,727	350.0	338.0	1.0355	27,676	27,676
T34800	MANHOLES		2001	136,494	350.0	350.0	1.0000	136,494	136,494
		T34800	Class Totals	516,873				546,184	546,184
T39000	STRUCT AND IMPROV		1999	631,624	350.0	324.0	1.0802	682,280	682,280
T39000	STRUCT AND IMPROV		2000	5,851	350.0	338.0	1.0355	6,059	6,059
		T39000	Class Totals	637,475				688,339	688,339
T39100	OFFICE FURN/EQUIP		1999	31,682	180.2	167.8	1.0739	34,023	34,023
		T39100	Class Totals	31,682				34,023	34,023

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Trended RCN
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Exhibit
Schedule B-4
Page 4
Witness: Bourassa

Company Code: 4023 Business Area: 4539 Anthem/Agua Fria Wastewater (Treatco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T39500	LAB EQUIP		1999	33,959	180.2	167.8	1.0739	36,469	36,469
T39500	LAB EQUIP		2001	2,200	180.2	180.2	1.0000	2,200	2,200
		T39500	Class Totals	36,159				38,669	38,669
Company Code:	4023	Business Area:	4539	17,709,315				18,192,835	18,180,084

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Trended RCN
Handy-Whitman

Exhibit
Schedule B-4
Page 5
Witness: Bourassa

Company Code: 4024 Business Area: 4541 Anthem/Agua Fria Wastewater (Distco)

			Year Installed	Original Cost	Base	Index	Trend Factor	Trended Cost	Trended Cost (Land/Intangibles NOT Trended)
T30200	FRANCH/CONSENTS		1999	76,136	180.2	167.8	1.0739	81,762	76,136
		T30200	Class Totals	76,136				81,762	76,136
T34300	COLL. MAINS		1999	1,165,667	324.0	306.0	1.0588	1,234,208	1,234,208
T34300	COLL. MAINS		2000	970,544	324.0	316.0	1.0253	995,099	995,099
T34300	COLL. MAINS		2001	948,352	324.0	320.0	1.0125	960,207	960,207
T34300	COLL. MAINS		2001	248,369	324.0	324.0	1.0000	248,369	248,369
		T34300	Class Totals	3,332,934				3,437,884	3,437,884
T34500	DISCHARGE SERVICES		1999	421,678	324.0	306.0	1.0588	446,473	446,473
T34500	DISCHARGE SERVICES		2000	408,144	324.0	316.0	1.0253	418,470	418,470
T34500	DISCHARGE SERVICES		2001	309,049	324.0	320.0	1.0125	312,912	312,912
T34500	DISCHARGE SERVICES		2001	32,064	324.0	324.0	1.0000	32,064	32,064
		T34500	Class Totals	1,170,936				1,209,920	1,209,920
T34800	MANHOLES		1999	273,309	350.0	324.0	1.0802	295,228	295,228
T34800	MANHOLES		2000	406,339	350.0	338.0	1.0355	420,764	420,764
T34800	MANHOLES		2001	300,375	350.0	348.0	1.0057	302,087	302,087
T34800	MANHOLES		2001	78,053	350.0	350.0	1.0000	78,053	78,053
		T34800	Class Totals	1,058,077				1,096,134	1,096,134

Company Code:	4024	Business Area:	4541	5,638,084	5,825,701	5,820,075

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 1
Witness: Bourassa

Line No.		Direct Test Year Adjusted Results	Label	Adjustment	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Rebuttal Adjusted with Rate Increase
1	**Revenues**						
2	Flat Rate Revenues	$ 880,474			$ 880,474	323,599	$ 1,204,073
3	Measured Revenues	-			-		-
4	Other Wastewater Revenues	986,072			986,072	-	986,072
5		$ 1,866,546		$ -	$ 1,866,546	$ 323,599	$ 2,190,145
6	**Operating Expenses**						
7	Salaries and Wages	$ 317,956	1/6	(61,890)	$ 256,067		$ 256,067
8	Purchased Wasterwater Treatment	19,925			19,925		19,925
9	Purchased Power	5,714			5,714		5,714
10	Fuel for Power Production	-			-		-
11	Chemicals	-			-		-
12	Materials and Supplies	(1,053)			(1,053)		(1,053)
13	Repairs and Maintenance	-			-		-
14	Office Supplies and Expense	72,565	7	(5,744)	66,821		66,821
15	Outside Services	26,544			26,544		26,544
16	Service Company Charges	287,577	10	(9,612)	277,965		277,965
17	Water Testing	-			-		-
18	Rents	8,308			8,308		8,308
19	Transportation Expenses	-			-		-
20	Insurance - General Liability	(3,612)	8	(150)	(3,761)		(3,761)
21	Insurance - health and Life	-			-		-
22	Regulatory Commission Expense - Rate Case	12,319			12,319		12,319
23	Miscellaneous Expense	241,357	9	(125)	241,232		241,232
24	Depreciation Expense	876,022	3	(11,251)	864,771		864,771
25	Taxes Other Than Income	17,520	2	(1,307)	16,213		16,213
26	Property Taxes	121,472	4	(12,420)	109,052		109,052
27	Income Tax	(87,213)		42,857	(44,357)		80,549
28					-		-
29	**Total Operating Expenses**	$ 1,915,401		$ (59,641)	$ 1,855,760	$ -	$ 1,980,666
30	**Operating Income**	$ (48,855)		$ 59,641	$ 10,786	$ 323,599	$ 209,480
31	**Other Income (Expense)**						
32	Interest Income	-			-		-
33	Other income	-			-		-
34	Interest Expense	(89,880)	5	8,533	(81,347)		(81,347)
35	Other Expense	-			-		-
36	Gain/Loss Sale of Fixed Assets	-			-		-
37	**Total Other Income (Expense)**	$ (89,880)		$ 8,533	$ (81,347)	$ -	$ (81,347)
38	**Net Profit (Loss)**	$ (138,735)		$ 68,174	$ (70,560)	$ 323,599	$ 128,133
39							
40	SUPPORTING SCHEDULES:					RECAP SCHEDULES:	
41	Rebuttal C-2					Rebuttal A-1	
42							
43							

Arizona American
Summary of Rebuttal Adjustments
Test Year December 31, 2001

Exhibit
Rebuttal Schedule C-2
Witness: Bourassa
Page1

	Water/ Sewer Label	Description	Agua Fria Anthem Wastewater
Revenues			
Revenues		None	
Other Revenues		None	
			$ -
Operating Expenses			
Salaries and Wages	1	Adjust to Actual 2002 Wages	$ (10,490)
	6	Adjust to Actual 2002 Additional (Corporate)	(51,400)
Purchased Water	11	Adjust to annualized 2001 qty ordered	
Purchased Wastewater Treatment		None	
Purchased Power		None	
Fuel for Power Production			
Chemicals		None	
Materials ans Supplies		None	
Repairs and Maintenance		None	
Office Supplies and Expense	7	Adjust to Actual 2002 Additional (Corporate)	(5,744)
Outside Services			
Service Company Charges	10	Adjust to Actual 2002 Service Company Charges	(9,612)
Water Testing		None	
Rents		None	
Transportation Expenses			
Insurance - General Liability	8	Adjust to Actual 2002 Additional (Corporate)	(150)
Insurance - Health and Life		None	
Rate Case Expense		None	
Miscellaneous Expense	9	Adjust to Actual 2002 Additional (Corporate)	(125)
Depreciation Expense	3	Depreciation Expense	(11,251)
Taxes Other Than Income	2	Adjust to 2002 PR Tax based on Actual Wages	(1,307)
Property Taxes	4	Property Taxes	(12,420)
Income Tax			42,857
Tolleson Wastewater User Fees		None	
Total Operating Expenses			$ (59,641)
Operating Income			$ 59,641

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line No.		Amount
1	Projected Salaries & Wages and Related Expenses	
2		
3	Actual 2002 Wages and Salaries	
4	0 Salaries & Wages	$ 199,310
5		
6	Direct Filing Proposed Wages and Salaries	
7	0 Salaries & Wages	209,800
8		
9	Increase (Decrease)	$ (10,490)
10		
11	Adjustment to Revenues and/or Expenses	$ (10,490)
12		
13		
14		
15		

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line No.		Amount
1	Projected Salaries & Wages and Related Expenses	
2		
3	PR Taxes Based on Actual 2002 Wages and Salaries	
4	# Taxes Other Than Income	16,213
5		
6	Direct Filing Proposed PR Taxes	
7	# Taxes Other Than Income	17,520
8		
9	Increase (Decrease)	$ (1,307)
10		
11	Adjustment to Revenues and/or Expenses	$ (1,307)
12		
13		
14		
15		

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Line No.						
1	Depreciation Expense					
2						
3	Account		Rebuttak		Depreciation	
4	No.	Description	Original Cost	Rate	Expense	
5		**Intangible**				
6	301.00	Organization	$ -	0.00%	$	-
7	302.00	Franchises	249,528	0.00%		-
8	303.00	Miscellaneous Intangibles	-	0.00%		-
9		**Subtotal Intangible**	$ 249,528		$	-
10						
11		**Treatment & Discharge**				
12	310.00	Land and Land Rights	$ 336,560	0.00%	$	-
13	311.00	Structures and Improvements	3,779	5.00%		189
14	312.00	Preliminary Treatment	829,927	5.00%		41,496
15	313.00	Primary Treatment Equipment	-	5.00%		-
16	314.00	Secondary Treatment Equipment	2,062,401	5.00%		103,120
17	315.00	Tertiary Equipment	8,731,796	5.00%		436,590
18	316.00	Disinfection Equipment	891,776	5.00%		44,589
19	317.00	Effluent Lift Station E	813,270	8.40%		68,315
20	318.00	Outfall Line	-	5.00%		-
21	319.00	Sludge, Treatment & Distribution	-	5.00%		-
22	321.00	Influent Lift Station	7,463	8.40%		627
23	322.00	General Treatment Equipment	83,108	5.00%		4,155
24		**Subtotal Treatment & Discharge**	$ 13,760,079		$	699,081
25						
26		**Collection and Influent**				
27	340.00	Land and Land Rights	$ -	0.00%	$	-
28	341.00	Structures and Improvements	-	1.67%		-
29	342.00	Collection System Lift	144,988	8.40%		12,179
30	343.00	Collection Mains	7,425,126	2.04%		151,473
31	344.00	Force Mains	1,918	2.07%		40
32	345.00	Discharge Services	1,170,937	2.04%		23,887
33	348.00	Manholes	-	2.03%		-
34		**Subtotal Collection and Influent**	$ 8,742,968		$	187,578
35						
36		**General**				
37	389.00	Land and Land Rights	$ 133	0.00%	$	-
38	390.00	Structures and Improvements	91,498	1.68%		1,538
39	391.00	Office Funiture and Equipment	43,914	4.55%		1,996
40	391.10	Computer Equipment	53,365	4.55%		2,426
41	392.00	Transportation Equipment	49,104	25.00%		12,276
42	393.00	Stores Equipment	785	3.92%		31
43	394.00	Tools, Shop and Garage	11,230	4.14%		464
44	395.00	Laboratory Equipment	3,557	3.71%		132
45	396.00	Power Operated Equipment	3,269	5.14%		168
46	397.00	Communication Equipment	19,814	10.28%		2,036
47	398.00	Miscellaneous Equipment	7,157	4.98%		356
48		**Subtotal General**	$ 283,827		$	21,424
49						
50						
51						
52		TOTALS	$ 23,036,403	3.94%	$	908,083
53						
54						
55						
56	Amortization of Deferred Regulatory Assets		$ 99,122	3.94%		3,907
57						
58	Less: Amotization of Contributions		$ 472,196	10.0000%		(47,220)
59	Rebuttal Depreciation Expense				$	864,771
60						
61	Direct Filing Depreciation Expense					876,022
62						
63	Increase (decrease) in Depreciation Expense					(11,251)
64						
65	Adjustment to Revenues and/or Expenses				$	(11,251)
66						

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line No.		
1	Adjust Property Taxes to Reflect Proposed Revenues:	
2		
3	Rebuttal Adjusted Revenues in year ended 12/31/01	$ 1,866,546
4	Rebuttal Adjusted Revenues in year ended 12/31/01	1,866,546
5	Proposed Revenues	2,190,145
6	Average of three year's of revenue	$ 1,974,413
7	Average of three year's of revenue, times 2	3,948,825
8	Add:	
9	Construction Work in Progess at 10%	
10	Deduct:	
11	Book Value of Transportation Equipment	49,104
12	Book Value of Transportation Equipment (proforma)	-
13	Total Book Value of Transportation Equipment	$ 49,104
14		
15	Full Cash Value	$ 3,899,721
16	Assessment Ratio	25%
17	Assessed Value	974,930
18	Property Tax Rate	11.185601%
19		
20	Property Tax	109,052
21	Tax on Parcels	
22		
23	Total Rebuttal Property Tax at Proposed Rates	$ 109,052
24	Direct Filing Proposed Property Taxes	121,472
25	Increase (Decrease) in Property Taxes	$ (12,420)
26		
27		
28	Adjustment to Revenues and/or Expenses	$ (12,420)
29		
30		

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line No.		
1	Interest Synchronization with Rate Base	
2		
3	Rebuttal Fair Value Rate Base	$2,789,661
4	Weigted Cost of Debt from Schedule D-1	2.92%
5	Rebuttal Synchronized Interest Expense	81,347
6	Direct Filing Interest Expense	89,880
7	Increase in Interest Expense	$ (8,533)
8		
9	Adjustment to Revenues and/or Expense	$ (8,533)
10		
11		

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
Page 7
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Wages Expense (Corporate)	$	56,757
5			
6	Direct Filing Proposed Additional Wages Expense (Corporate)		108,156
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(51,400)
10			
11	Adjustment to Revenue and/or Expense	$	(51,400)
12			
13			
14			
15			

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Office Expense (Corporate)	$	23,547
5			
6	Direct Filing Proposed Additonal Office Expense (Corporate)		29,291
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(5,744)
10			
11	Adjustment to Revenue and/or Expense	$	(5,744)
12			
13			
14			
15			

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
Page 9
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Insurance Expense (Corporate)	$	4,781
5			
6	Direct Filing Proposed Additonal Insurance Expense (Corporat		4,931
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(150)
10			
11	Adjustment to Revenue and/or Expense	$	(150)
12			
13			
14			
15			

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 9

Exhibit
Rebuttal Schedule C-2
Page 10
Witness: Bourassa

Line No.			
1	Projected Additional Expenses		
2			
3			
4	Actual 2002 Additional Misc. Expense (Corporate)	$	4,050
5			
6	Direct Filing Proposed Additonal Misc. Expense (Corporate)		4,175
7			
8			
9	Increase (Decrease) in Addtional Expenses	$	(125)
10			
11	Adjustment to Revenue and/or Expense	$	(125)
12			
13			
14			
15			

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Adjustments to Revenues and Expenses
Adjustment Number 10

Exhibit
Schedule C-2
Page 11
Witness: Bourassa

Line No.			
1	Service Company Charges		
2			
3	Total 2002 Charges	$ 4,981,460	
4	Allocation Factor (4 factor Formula)	0.0558	
5	Total Charges		$ 277,965
6			
7			
8	Direct Filing Proposed Charges	$ 5,153,711	
9	Allocation Factor (4 factor Formula)	0.0558	
10	Total Charges		287,577
11			
12			
13	Adjustment to Revenues and/or Expenses		$ (9,612)
14			
15			
16			
17			

Arizona American - Anthem/Agua Fria Wastewater
Test Year Ended December 31, 2001
Summary of Cost of Capital

Exhibit
Rebuttal Schedule D-1
Page 1
Witness: Bourassa

Line No.	Item of Capital	End of Test Year Percent of Total	(e) Cost Rate	Weighted Cost	End of Projected Year Percent of Total	(e) Cost Rate	Weighted Cost
1	Long-Term Debt	60.00%	4.86%	2.92%	60.00%	4.86%	2.92%
2							
3	Stockholder's Equity (c)	40.00%	11.50%	4.60%	40.00%	11.50%	4.60%
4							
5	Totals	100.00%		7.52%	100.00%		7.52%
6							
7							
8	SUPPORTING SCHEDULES:				RECAP SCHEDULES:		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Rebuttal Testimony for:
WS-01303A-02-0867
WS-01303A-02-0868
W-01303A-02-0869
WS-01303A-02-0870
W-01303A-02-0908

PART 1 OF 2
BAR CODE # 0000009342

To review Part 2 please see:

BAR CODE #0000108820